

STATEMENT OF QUALIFICATIONS

I-95 EXPRESS LANES - SOUTHERN TERMINUS EXTENSION

STAFFORD COUNTY, VIRGINIA

STATE PROJECT NO.: 0095-969-720

CONTRACT ID NUMBER: C00T17210DB90



PREPARED FOR:



SUBMITTED BY:



3.2 LETTER OF SUBMITTAL



February 8, 2016

Mr. Suril R. Shah
Alternate Project Delivery Office
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

RE: I-95 Express Lanes – Southern Terminus Extension
State Project No.: 0095-969-720
Contract ID Number: C00T17210DB90

Dear Mr. Shah:

The Lane Construction Corporation (LANE) is pleased to present this Statement of Qualifications for the above referenced project to the Virginia Department of Transportation (VDOT). LANE is nationally ranked as the #1 Highway Contractor by *Engineering News-Record (ENR)* for the 3rd year in a row and specializes in high quality roadway and bridge construction. LANE has a long and successful history of project completion in Virginia having completed nearly 150 projects worth over \$2.4B in the Commonwealth alone.

As a leader in the Design-Build method (nationally ranked as the 44th Top Design-Build Firm by *ENR*), LANE has constructed more than 70 projects worth more than \$3B in Design-Build projects during the last decade. LANE's teaming and leadership experience enables us to deliver the innovative and technically sound results that VDOT and Virginia residents expect and deserve.

LANE is the Offeror and will be the overall authority on the project as well as the Lead Contractor. We have teamed with Rinker Design Associates, PC (RDA) as the Lead Designer. LANE and RDA have a history of teaming together and worked closely on the recently complete I-95 Express Lanes project. Together, we provide VDOT with a reputable team that has completed projects of this size and scope on time and on budget as evidenced in our collective project experiences.

LANE and RDA, in conjunction with additional hand-selected design and construction specialty firms, are experienced with VDOT processes and procedures and will provide design and construction for the I-95 Express Lanes – Southern Terminus Extension project. We are confident in our team structure and experience, and have elaborated on our distinctive qualifications in the subsequent sections.

3.2.2 Offeror's Point of Contact Information: Mr. Robert E. Watt is the point of contact and authorized representative for the LANE team for all matters associated with this qualifications submittal.

Robert E. Watt, Pursuit Manager
14500 Avion Parkway, Suite 200
Chantilly, VA 20151
Tel: (703) 222-5670 Fax: (703) 222-5960
Email: REWatt@laneconstruct.com

The Lane Construction Corporation

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3.2.3 Offeror's Principal Officer Information: Mr. David J. Rankin is the principal officer of The Lane Construction Corporation.

David J. Rankin, Senior Vice President
14500 Avion Parkway, Suite 200
Chantilly, VA 20151
Tel: (704) 553-6500 Fax: (703) 222-5960
Email: DJRankin@laneconstruct.com

3.2.4 Offeror's Corporate Structure: LANE was founded in 1890 and was incorporated in the State of Connecticut on April 5, 1902. LANE will undertake the financial responsibility for the project and has no known liability limitations. LANE's pre-qualification status/capabilities with VDOT are well in excess of the requirements of this project. The co-sureties will furnish a single 100% performance bond and a single 100% payment bond.

3.2.5 Lead Contractor and Lead Designer: The full legal name of the Offeror is: The Lane Construction Corporation. LANE will serve as the prime/general contractor responsible for overall construction of the project and will serve as the legal entity who will execute the contract with VDOT. The full legal name of the Lead Designer is: Rinker Design Associates, PC. RDA will serve as the lead design firm responsible for the overall design of this Project under contract to LANE.

3.2.6 Affiliated/Subsidiary Companies: A complete list of affiliates and subsidiary companies may be found in the Appendix.

3.2.7 Debarment Forms: Certifications for Debarment for both Primary and Lower Tier Covered Transactions have been completed and executed for the Offeror and all subconsultants, subcontractors, and other entities as identified as members of the LANE team and may be found in the Appendix.

3.2.8 Offeror's VDOT Prequalification Evidence: Evidence from VDOT's online Prequalified List (L002/Active) is included in the Appendix and verifies that LANE is prequalified for this SOQ submission.

3.2.9 Letter of Surety: A surety letter from the bonding companies is included in the Appendix, confirming their willingness to provide any and all bonds for this project.

3.2.10 Professional Services Evidence: The matrix in the Appendix delineates the respective state registrations and licensures of the LANE Team. The Offeror and all team members are eligible at the time of the SOQ submittal, under the law and relevant regulations, to offer and to provide any services proposed or related to the project. Respective copies of licenses may be found in the Appendix.

3.2.11 DBE Statement: LANE supports the Disadvantaged Business Enterprise (DBE) program and is committed to meeting the 15% goal for the design and construction of this project utilizing Virginia certified DBE companies.

Through our proven performance, our Team will deliver this project safely, on time and within budget. We appreciate the opportunity to present our qualifications and look forward to working with VDOT on this important project.

Respectfully submitted,



Robert E. Watt
Pursuit Manager
The Lane Construction Corporation

3.3 OFFEROR'S TEAM STRUCTURE

3.3 | OFFEROR'S TEAM STRUCTURE

LANE The Lane Construction Corporation (LANE) will serve as the Lead Contractor of the D-B team for the I-95 Express Lanes – Southern Terminus Extension (I-95 Southern Extension) project and will be responsible for managing the project, supervising construction, and self-performing the major work elements. LANE was named the 2015 Top Contractor by *ENR MidAtlantic* and is ranked #44 in Top D-B Firms by *ENR*. Our proven heavy civil experience in bridge and roadway construction and more than 70 D-B projects ranging in scope and value from \$13M to \$1.5B demonstrates LANE's ability to tackle the region's most challenging infrastructure projects.

Construction Subconsultants

Under subcontract to LANE are the following highly qualified subconsultants:

- Rinker Design Associates, PC (Quality Assurance)
- Sabra Wang (ITS)
- EM Tech (AMRL Certified QC Lab)



Rinker Design Associates, PC (RDA), as the Lead Designer, will provide overall project management for all design activities. RDA is a Virginia-based firm with over 100 employees with offices in Manassas, Fredericksburg, and Richmond. They are an award-winning Virginia-Certified Small Business (DSBSD Certification #652784) and have served as the lead designer on thirteen (13) D-B projects in the past ten (10) years and have supported another five (5) over the same timeframe.

Design Subconsultants

Under subcontract to RDA are the following highly qualified subconsultants:

- DMY Engineering Consultants (Geotechnical)
- Sabra Wang (ITS Design)

LANE and RDA have a long history of teaming together on important D-B projects in the Commonwealth. Together LANE (JV Construction Member) and RDA (responsible for MOT, ROW Acquisitions, and Utility Coordination) completed VDOT's very successful I-95 Express Lanes project. ***Our Team's experience working on the adjacent section of I-95 is unmatched by any of our competition. We are confident the LANE Team possess the most relevant and recent experience and has proven means and methods in place to complete the I-95 Southern Extension project with minimal risk to VDOT.***

In addition, LANE and RDA are teaming together on two other VDOT projects: the I-66/Route 15 D-B project in Prince William County (where RDA is the Lead Designer), and the Route 29 Solutions D-B project. Both projects' designs are complete and construction activities are underway.

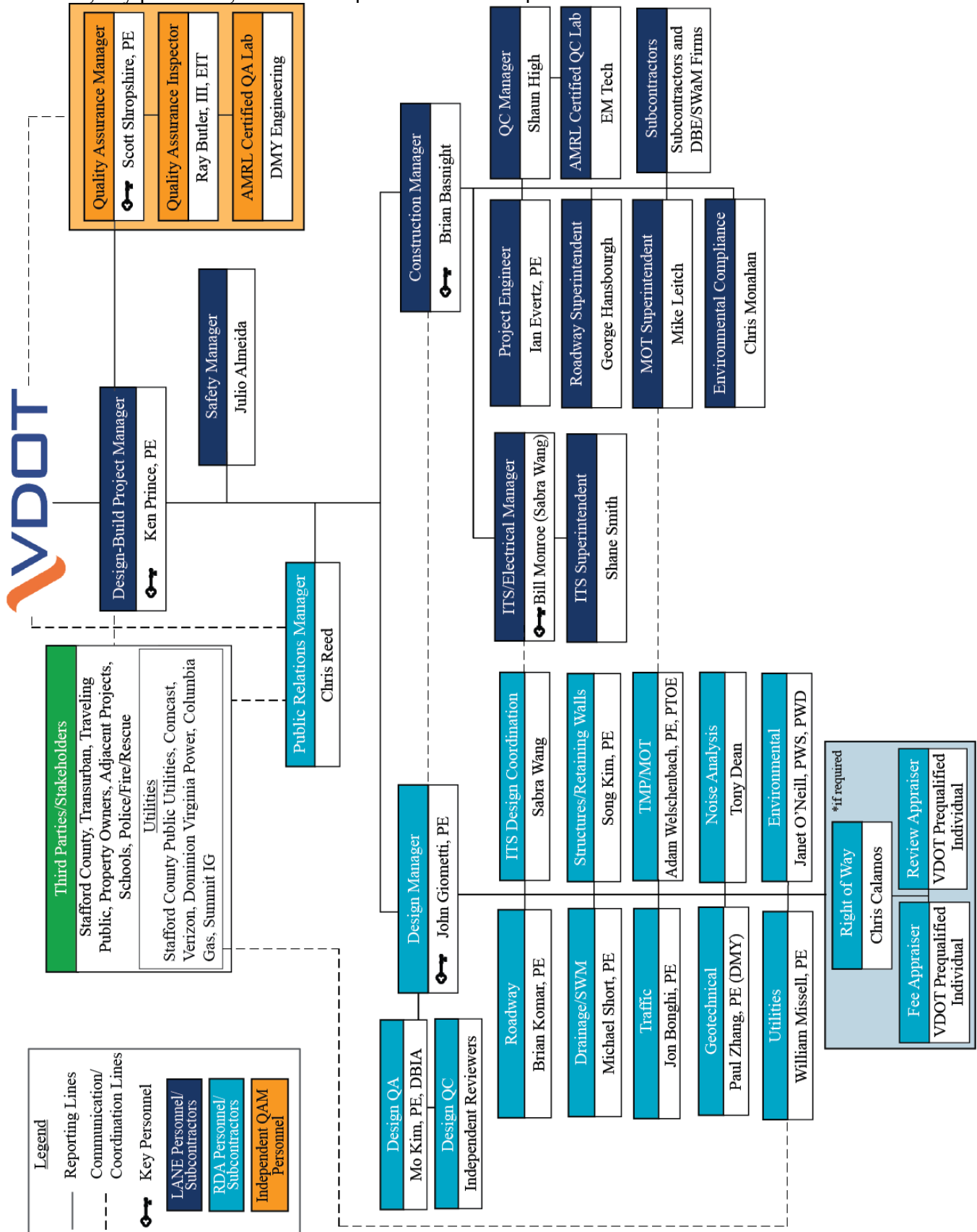
3.3.1 Qualifications of Key Personnel

All of the proposed Key Personnel have noteworthy experience on transportation projects similar to the roles they will serve on the I-95 Southern Extension project. Information regarding their experience can be found in Attachment 3.3.1 in the Appendix.

Name	Position	Company
Ken Prince, PE	D-B Project Manager	LANE
Scott Shropshire, PE	Quality Assurance Manager	RDA
John Giometti, PE	Design Manager	RDA
Brian Basnight	Construction Manager	LANE
Bill Monroe	ITS/Electrical Manager	Sabra Wang

3.3.2 Organizational Chart

The LANE Team organization has a straight-forward chain of command, with individual tasks, responsibilities, and functional relationships clearly identified. The following Organizational Chart depicts VDOT, third party stakeholders, key personnel, and their respective relationships and functions.



Reporting Relationships of Key Personnel

D-B Project Manager (DBPM), Mr. Ken Prince (LANE) *will report to VDOT and serve as VDOT's central point of contact.* He will facilitate communication among VDOT, team partners and adjacent projects, monitor design efforts to proactively eliminate potential constructability issues prior to breaking ground, and delegate resources to deliver the project on time. It will be his responsibility to work with the Team to ensure that the design complies with the owner's specifications. Mr. Prince's management from design through construction will include weekly design and construction meetings to discuss how the Team will construct the project. Additionally, he is responsible for construction quality management, contract administration, and coordination of public outreach and public meetings.

☑ Added Value: Mr. Prince was the District Manager on the \$726M I-95 Express Lanes project and the I-95 Shoulder and Auxiliary Lanes Improvements. His experience in the corridor, relationships with major stakeholders (including the I-95 Express Lanes Concessionaire), first-hand knowledge of the scope of work, and familiarity with the complex ITS integration is unmatched.

Quality Assurance Manager (QAM), Mr. Scott Shropshire, PE (RDA) *will report directly to the DBPM on all quality issues.* Any item of work failing to meet minimum standards will be rejected and corrected immediately. Construction personnel have no authority over QA inspection staff. Mr. Shropshire will keep VDOT informed on the status of quality of construction and issues/resolutions/solutions through weekly reports and progress meetings. As QAM, Mr. Shropshire will hold the authority to shut down the job if quality issues warrant. **Quality Assurance Inspector, Mr. Ray Butler, III, EIT (RDA),** *will report directly to the QAM, and will be assigned to the project on a full-time basis for the duration of the project.* DMY Engineering (AMRL Certified QA laboratory) *will report to Mr. Shropshire.*

☑ Added Value: Mr. Shropshire has completed numerous projects in Stafford County and has extensive knowledge of the project area couple with strong, professional knowledge of the project area coupled with strong professional relationships with the Fredericksburg District and Stafford County. In his tenure at VDOT, Mr. Shropshire was the Area Construction Engineer (ACE) for over 120 contracts. Fredericksburg District.

Design Manager, Mr. John Giometti, PE (RDA) *will report directly to the DBPM.* Mr. Giometti, a Virginia PE, will maintain close communication with the DBPM and CM, and will ensure the overall project design is completed in accordance with the requirements of the Contract Documents. All design, including ITS, geotechnical, ROW, and permitting disciplines report directly to Mr. Giometti. He will provide design plans for VDOT's review and approval. Mr. Giometti is also responsible for establishing oversight of the QA/QC program for all design disciplines of the project which will be performed by qualified, independent staff personnel.

☑ Added Value: Mr. Giometti has recently served as design manager on two locally-administered, D-B projects in Stafford County (Fredericksburg District), Truslow and Garrisonville Roads. In addition, he has recently completed the design of the Route 29 Widening, serving as the Design Element Lead for LANE on the Route 29 Solutions design-build project in Charlottesville, VA (*included in Work Histories*). Prior to coming to RDA, Mr. Giometti had a 20 year career with VDOT, culminating as the Location and Design Engineer in Culpeper District.

Construction Manager, Mr. Brian Basnight (LANE) *will report directly to the DBPM and will be on-site full-time for the duration of the project.* His daily duties include: safety, coordination of all project personnel including subcontractors, and execution of the construction QC program. He holds ultimate responsibility for managing the construction schedule with his staff engineers and coordinating regularly with adjacent projects underway. He will coordinate daily meetings with the QA Lead Inspector, and QC Manager to discuss all ongoing construction activities. He will also review all construction QC reports and lab results. Mr. Basnight is available at Notice of Intent. Mr. Basnight currently holds a DEQ RLD Certification and a VDOT ESCCC as required.

☑ Added Value: Mr. Basnight served as Construction Manager (Area 1/Bridge) on I-95 Express Lanes and worked closely with proposed DBPM, Mr. Prince. His hands-on experience working on the I-95 corridor, in particular the southern portion of the I-95 Express Lanes, will be an incredible asset to the Team and the success of the project.

Other Functional Relationships

The LANE Team also includes the following recognized specialists whom we deem critical to this Project, albeit non-key personnel as defined by the RFQ; their relevant qualifications are summarized below.

Name/Position	Yrs Exp	D-B	Roadway Widening	Complex MOT	ITS	Worked with LANE
<i>Other pertinent design disciplines that will report directly to Mr. Giometti, PE (DM) include:</i>						
Mo Kim, PE, DBIA/Design QA	19	●	●	●	●	●
Song Kim, PE/Structures	23	●	●	●	●	●
Jon Bonghi, PE/Traffic	10	●	●	●	●	
Michael Short, PE/Drainage	11	●	●	●		●
Tony Dean/Noise Analysis	13	●	●	●	●	●
Brian Komar, PE/Roadway	14	●	●	●		●
Adam Welschenbach, PE, PTOE/MOT	13	●	●	●	●	●
Janet O'Neill, PWS, PWD/Environmental	41	●	●	●		●
William Missell, PE/Utilities	27	●	●	●		●
Paul Zhang, PE/Geotechnical	15	●	●	●		

Name/Position	Yrs	D-B	Roadway Widening	Complex MOT	ITS	Worked with RDA
<i>Other pertinent construction disciplines that will report directly to Mr. Basnight (CM) include:</i>						
George Hansbrough/Roadway Superintendent	27	●	●	●	●	●
Shaun High/ QC Manager	15	●	●	●	●	●
Shane Smith/ ITS Superintendent	22	●	●	●	●	
Mike Leitch/ MOT Superintendent	11	●	●	●	●	●
Chris Monahan/Environmental	14	●	●	●	●	●
Ian Evertz/Project Engineer	11	●	●	●	●	

Design and Construction Team Interaction

The LANE Team ascribes to the DBIA paradigm that “integrated development of the design and construction program is the cornerstone of D-B delivery and this methodology optimizes opportunities for collective excellence.” Put into practice, our design team will interface with our construction team and vice versa throughout the life of the contract.

The LANE Team’s extensive D-B experience has shown that regularly scheduled discipline coordination meetings throughout project execution are critical to ensuring a successful project. These focused meetings, which are led by the DBPM, serve as a conduit for disseminating project-critical information

and are the central point of decision-making and communication among all involved in the project. These regular, open forums of discussion among team members (both design and construction) and VDOT to address respective project elements serve to clearly define project criteria, ensure VDOT's intentions are being met, address corridor-wide safety and constructability issues, and provide consistency in design before becoming schedule-critical.

Through this approach, we create strong relationships that set the foundation to interact and partner with VDOT and third-party stakeholders, streamline reviews, eliminate potential construction field issues, and deliver the project safely, as early as possible.

Construction Support During Design. *Construction staff are engaged to ensure designs are constructable and tailored to support the most efficient execution strategy.*

Construction Support During Design	Benefit
Critical input in development of work packaging and D-B strategy	Incorporates construction expertise to develop most efficient construction sequence and schedule logic
Advising design team on self-performance vs. subcontracting of specific construction elements	Enables tailoring of design/construction documentation to construction delivery
Providing input on construction means and methods to design packages	Ensures practical designs that support planned construction approaches
Constructability, operability and pricing reviews of design documents	Ensures design documents are implementable and will achieve intended purpose

Design Support During Construction. *Engineering staff continue to support construction to ensure design intent is achieved.*

Design Support During Construction	Benefit
Preparation of subcontractor statements of work	Ensures translation of design requirements into subcontractor statements of work
Assignment of design engineer(s) on-site, as required	Provides assistance in interpretation of design requirements and responding to field changes
Providing support due to field changes requiring design changes	Ensures consistency of design changes with intent of original design
Providing and verifying final as-built drawings	Provides correlation between original design, design changes, and as-built construction

3.4 EXPERIENCE OF OFFEROR'S TEAM

3.4 | EXPERIENCE OF OFFEROR'S TEAM

LANE and RDA have individually performed more than \$2B in D-B projects for VDOT over the past 8 years. As a Team, we have performed in excess of \$900M. This experience, together and individually, but specifically in D-B projects, is critical to the success that we will deliver to the Department on this project.

Unmatched Express Lanes Experience

There is no other competitor that has the experience LANE has constructing the Express Lanes. As the contractor on both the 495 Express Lanes and the 95 Express Lanes, LANE has proven means and methods in place to complete the I-95 Southern Extension project with minimal risk to VDOT. We seamlessly integrated the 495 Express Lanes and the 95 Express Lanes projects and understand the complexities and challenges involved. Our strong working relationship with the I-95 Express Lanes Concessionaire for the past eight (8) years will also prove to be an invaluable asset to VDOT and the overall success of the project.

The LANE Team possesses the most relevant and recent experience and has proven means and methods in place to complete the I-95 Southern Extension project with minimal risk to VDOT.



Award Winning Team

Numerous awards were presented to our Team for both 495 Express Lanes and 95 Express Lanes projects including multiple safety awards (*ARTBA 2011 Work Zone Safety Awareness Award*, *NAPA 2012 Operations Safety Innovation Award*, *ARTBA's 2015 Safest Project of the Year*), awards for development (*Excellence in Virginia Government Public Private Partnership Award*, *P3 Highway Project of the Year finalist*), finance (*Euromoney - Bond Deal of the Year*), public outreach (*VDOT and Megaprojects, Commonwealth of Virginia Award of Excellence, Integrated Communications*), DBE efforts (*2013 Prime Contractor of the Year Award*) and construction (*Construction Management Association of America 2013 Project Achievement Award*, *ENR's 2015 Project of the Year in the Mid-Atlantic*).

3.4.1 Work History Forms

Work History Forms (Attachments 3.4.1(a) and (b)) as required for LANE (Lead Contractor) and RDA (Lead Designer) are included in the Appendix.

3.5 | PROJECT RISKS

The LANE Team has carefully considered the key elements of work for the I-95 Southern Extension project to determine the three most relevant and critical Project Risks *for our Team to mitigate* for the success of this Project. In making our assessment, we considered numerous potential risks to the project including: geotechnical conditions, ITS integration, utilities, existing pavement condition, TMP/work zone access, agency/stakeholder coordination, public relations, permitting, and Stormwater Management, and ROW acquisitions. Each of these risk items will have a major impact on the project if not properly assessed and mitigated. We have concluded **ITS Integration, TMP/Work Zone Access, and Geotechnical Conditions** are the three most critical risks to the success of this project. The table below highlights experience successfully mitigating these three risks on some of the recent projects LANE and RDA have worked on together.

LANE/RDA Projects	Contract Value (\$M)	Design-Build	Risk #1 ITS	Risk #2 TMP/Work Zone Access	Risk #3 Geotechnical			
			ITS Integration	High Speed/High ADT Access	Slope Stability	Embankment Settlement	Unsuitable Subgrades	Acidic Soils
I-95 Express Lanes	726	●	●	●	●	●	●	●
I-66/Route 15	36	●		●	●		●	
29 Solutions	117	●	●	●	●	●	●	
Sudley Manor/Linton Hall	25	●			●	●	●	

RISK NO. 1 – ITS INTEGRATION

Risk Identification: Failure to execute a seamless ITS systems integration, commissioning and unveiling would have negative impacts for not only the D-B Team but the traveling public, first responders, I-95 Express Lanes Concessionaire, and VDOT. There is significant risk with potential broad implications, especially when extending and integrating an existing live ITS system within a heavily traveled corridor such as I-95.

Why the ITS Integration Risk is Critical and the Impacts to the Project: Having recently completed the I-95 Express Lanes Project (*see Work Histories*) and the I-95 Shoulder and Auxiliary Lanes Improvements (*see Work Histories*) projects, our Team is very familiar with existing ITS system and fiber networks along the I-95 corridor. We also have extensive experience performing the same in many other states. From this experience we know that *integration of the gates, cameras and DMS signs would be our highest risk component of all*. The Southern Terminus of Transurban's Express Lanes ITS network will need to be shut down in order to splice in the newly constructed Southern Extension ITS/Fiber network. VDOT's existing fiber network will also require integration here. It will be absolutely critical to plan, manage, sequence and execute this work in a seamless manner. If the splicing and associated operations are not executed perfectly, negative impacts to the Express Lanes operations could be realized which in turn could literally affect hundreds of thousands of motorists which, along the I-95 corridor, has a higher than normal mix of government, military and other essential personnel.

It is not only the ITS systems that will require close coordination with the I-95 Express Lanes Concessionaire, other items requiring coordination will include; *project Schedule and coordination of work time and lane closure restrictions* – ALL work will have to carefully planned ahead and prepared for – we could easily be forced to revise our schedule due to the I-95 Express Lanes Concessionaire changing their schedule. *Locations and configurations of existing underground facilities* – it is always a concern placing new conduit in areas where sensitive existing utilities are as there could be a potential conflict. *Lighting* – will require coordination as the

retrofitting of panels to accommodate existing lighting has historically been a problem. The D-B Team will also need to determine that any existing lighting is fully operational and there are no pre-existing maintenance issues. As stated, the LANE Team will pro-actively pursue partnering with the I-95 Express Lanes Concessionaire and VDOT.

Coordination with the I-95 Express Lanes Concessionaire and VDOT is a requirement and will be absolutely critical for all aspects of our work in order for this to be a successful Project. The RFQ states; *“Coordination will be required with the I-95 Express Lanes Concessionaire and the Department, in order to fully integrate the proposed ITS devices. Furthermore, coordination of work time and lane closure restrictions will be required. The Design-Builder’s schedule will need to fully account for I-95 Express Lanes Concessionaire schedule requirements.”* Ineffective or lack of communication by any partner or stakeholder could easily affect the Project’s success.

ITS Integration Risk Mitigation Strategy: There are several methods in which our Team will utilize for mitigation. One method will be to utilize the pre-established equipment brand and model numbers for all ITS devices including cameras, DMS, Gate and Ethernet switches. This will eliminate any compatibility and interface conflicts.

The LANE Team will draw on our experience from our two recent projects along the I-95 corridor. On the I-95 Express Lanes project, LANE managed the design and installation of the entire fiber backbone as well as the entire ITS system. On the I-95 Shoulder and Auxiliary Lanes Improvements project, the ITS scope of work included the installation of new, modification of existing, and integration of the system into the exiting VDOT network. The work included over 5 miles of conduit, 50 miles of conductor cable, over four miles of 12/24/48 pair fiber optic cable, junction boxes, CCTV and DMS, and new ITS cabinet installation and communication equipment relocation. Our Team knows from these and other similar project experiences as well as lessons learned there are several key mitigations to ensure this work goes off without flaw:



As the contractor on both the 495 Express Lanes and the 95 Express Lanes, LANE understands the complexity that is involved with ITS integration.

- Where active ITS systems are being integrated, the necessity of establishing the desired fiber splicing and communications schema early in the design and construction period are essential
- Early delivery of all communications and other ITS equipment so that it may be programmed and tested prior to any planned opening well enough in advance to be able to react and repair or replace any equipment not operating properly
- Perform “dry-runs” of critical procedures to help identify any unsuspected problems
- Verify the location of all existing ITS underground facilities by way of a test hole program

The LANE Team will coordinate all planned lane closures, detours and work times in detail to receive buy-off from both VDOT and the I-95 Express Lanes Concessionaire. We will insist on the I-95 Express Lanes Concessionaire’s attendance at critical meetings to plan such work as ITS/sign unveilings, splicing activities, commissioning of systems and new traffic shifts. Items such as locations and configurations of existing underground facilities and the scoping/execution of highway lighting will also be coordinated closely with both VDOT and the I-95 Express Lanes Concessionaire. Again, we have learned the best mitigation for this risk is to plan it in detail well in advance.

Our Team has worked directly with the I-95 Express Lanes Concessionaire on several projects. We know how to work with them and will do so proactively to share work plans, identify critical pinch points in the schedule

and to agree on expectations and responsibilities. Because we have to account for the I-95 Express Lanes Concessionaire's schedule, we will insist on a mutual schedule agreement up front and put in place schedule change protocols coming from both sides, the I-95 Express Lanes Concessionaire and Design Builder.

LANE managed the design, integration and installation of ITS systems and devices on the 495 Express Lanes, 95 Express Lanes, and I-95 Shoulder Improvements projects.

Role of VDOT and other Agencies: Since both the I-95 Express Lanes Concessionaire and VDOT own and operate the existing ITS system, fiber optic lines, DMS as well as other hard assets that will either be affected or integrated into the new ITS system, both the I-95 Express Lanes Concessionaire and VDOT will need to furnish certain technical, as-built or device information as requested, provide coordination personnel capable of attending coordination meetings, possess knowledge of existing facilities and operations and will be able to answer technical questions regarding the integration. The I-95 Express Lanes Concessionaire will also need to communicate and provide coordination regarding their schedule and the Design-Builder's work hours, lane closures etc. VDOT will also provide comments and or approvals for all ITS related design submittals.

RISK NO. 2 – TMP/WORK ZONE ACCESS

Risk Identification: Impacts to the traveling public during construction are always a concern, but is magnified when it involves a major high volume corridor such as I-95. The I-95 Corridor is one of the most congested corridors in the nation providing a vital north-south transportation link for local, regional, and interstate travelers. Minor fender benders or other incidents can wreak havoc on a congested corridor such as I-95, resulting in multi-mile back-ups that can take hours to dissipate. Not only will this cause inconvenience to the public, it will disrupt material deliveries and access to the work zone by the contractor. In particular, access to the work zone will be at critical feature needing special attention to avoid risk to public and contractor safety. It is anticipated that the project will be a borrow job increasing the number of heavily loaded trucks in and out of that work zone. The speed differential between construction traffic accessing the work zone and the prevailing traffic has potential to become a safety problem if not accommodated properly. Of paramount importance will be the safety of the traveling public, as well as, the safety of construction workers, VDOT representatives, and inspection staff. An effective transportation management plan that minimizes disruptions to traffic flow will be imperative to ensure that public perception of this important transportation improvement remains positive.

Why the TMP/Work Zone Access Risk is Critical and the Impacts to the Project: Aside from safety and public inconvenience, disruptions to access and egress from the work zone in this highly congested corridor are at risk. Failure to implement an effective TMP or design safe work zone access may contribute to traffic congestion and would impact schedule by restricting delivery of materials. Any disruptions to material delivery and work operations not only will impact safety and public perception, but will impact schedule as well.

Risk Mitigation Strategy: The LANE Team's mitigation strategies will begin with the development of the TMP that will focus on communication, incident management, and special attention to construction staging and access. RDA served as the lead consultant responsible for the TMP on the I-95 Express Lanes project with LANE and will provide added value in mitigating this risk. Through our teaming experience, the LANE Team has a well-integrated MOT/TMP strategy that smoothly transitions from design to implementation. The TMP will be further influenced by LANE's extensive experience with the I-95 Express Lanes, I-495 Express Lanes (*see Work Histories*), and past working relationship with the I-95 Express Lanes Concessionaire.

Public Awareness and Outreach: The LANE Team will keep the public informed of construction plans and schedules to include changes to traffic movements, lane closures, and other changes in project status. Coordination with both the Regional Traffic Operations Center and the Fredericksburg District Office will be necessary to ensure consistent messages to any regional or local stakeholders seeking information related to their travel in the corridor. The LANE Team public outreach strategies will include the following:

- Dynamic messaging signs to provide advance warning and current work zone activities
- Provide up to date information for construction progress, work zone changes, and incident reports
- Provide a line of communication (hotline) for the public during construction to express concerns
- Commuter lot windshield flyers as needed to alert commuters to upcoming changes
- Initiate a formal partnering with VDOT, Stafford County, and first responders to review the TMP, construction schedules, incident response plans, and changing traffic patterns before implementation.

Mr. Chris Reed will serve as the LANE Team’s Public Relations Manager. Mr. Reed provided the same duties for Lane on the Route 29 Solutions Project in Charlottesville, VA (*see Work Histories*) and provided a similar role for VDOT on several mega-projects in the NOVA District including Woodrow Wilson Bridge and the I-495 Express Lanes. Mr. Reed developed successful public involvement programs and stakeholder strategies that proved to be instrumental to the success of those projects.

Incident Management Plan: An effective TMP provides accommodations for unexpected and/or unplanned events such as disabled vehicles, accidents, weather, and other special events. We will develop and implement a plan that will deal with such events outside of our control. The Incident Management Plan will provide the following:

- 24/7 contacts for emergency notification of an incident by the TOC
- Emergency detour routes
- Coordination with VDOT Northern Virginia Region TOC
- Coordination with first responders
- Law enforcement, fire, and rescue access to work zones during incidents
- Pre-planned messages for various types of incidents for portable DMS
- On-call wrecker service to quickly respond to disabled vehicles

These strategies plus the LANE Team’s previous experience in the corridor, specifically the I-95 Express Lanes project, will minimize the risk posed by work zone incidents. In fact, RDA, in collaboration with LANE, coordinated and partnered with the Virginia Megaprojects office and the Northern Region Operations (NRO) during the development of MOT/TMP strategies for I-95 Express Lanes.

Construction Staging and Access: The LANE Team will locate staging areas and work zone access points strategically to minimize impacts to traffic along the corridor. Special consideration will be given to minimize access points and develop internal haul roads for the movement of material on-site. Access points will be well signed, delineated, and provide adequate acceleration and deceleration lanes to ensure maximum safety for the travelling public interacting with slower moving construction vehicles. The LANE team will develop a construction schedule that will optimize the use of these access points and material deliveries to minimize disruptions to traffic. In many cases material deliveries may need to be restricted to off-peak hours.

The I-495 Express Lanes team received the *VDOT and Megaprojects, Commonwealth of Virginia Award of Excellence, Integrated Communications* award for their continuous efforts to ensure the public was involved and informed throughout the duration of the project.

Role of VDOT and other Agencies: Our proposed public outreach, incident management plan, and partnering initiatives will help stakeholders identify the LANE Team as their point of contact should issues arise. These strategies will minimize the need for additional effort by VDOT; reducing their role to one of partnership to include TMP review/approval and dissemination of information through the TOC. The LANE Team’s past experience, proven delivery methods, and collaborative approach will ensure an effective TMP will be achieved that minimizes the likelihood of additional VDOT staff involvement.

RISK NO. 3 – GEOTECHNICAL CONDITIONS

Risk Identification: A Geotechnical Data Report (GDR) for the project was not provided to the Design-Build team at this time. The DB Team has reviewed the project information provided by VDOT in the RFQ information package and available soils and geologic information on the project site. The D-B Team also considered the recent experience on projects in the same geologic settings. The VDOT-provided roadway profile indicates up to 30 feet of cut and 35 feet of fill in order to establish the proposed grades along portions of the project alignment. Nearly the entire project alignment falls within the Lower Cretaceous Aged Potomac Formation (Kp), with the northern and southern ends of the project located in the existing I-95 embankment fills and potentially the Holocene and Pleistocene Aged Alluvium (Qal).

The D-B Team has identified the geotechnical conditions and construction practices as a major risk factor. The identified geotechnical risks include the design and construction of high cut and fill slopes, settlement due to deep embankment fills in the existing low-lying median areas of I-95, potential unsuitable subgrade materials, and the likely presence of acidic soils. Understanding these risks and developing the geotechnical exploration program and the subsequent design and construction strategies are the key to mitigate these risks.

LANE, as part of the I-95 Express Lanes project, successfully dealt with each of the geotechnical conditions that our team believes is a risk factor for this project and will draw upon that experience and expertise to ensure a successful outcome for this project.

Why the Geotechnical Conditions Risk is Critical and the Impacts to the Project: Based on the LANE Team's experience in the corridor, geotechnical conditions are likely to have multidimensional impacts to the project. The conditions we encounter (slope stability, embankment settlement, unsuitable soils, and acidic soils) will affect MOT, safety, maintenance, schedule and cost.

Slope Stability: Proposed cut slopes up to 30 feet are anticipated for the project. The highly plastic soils (CH and MH) of the Potomac Formation are known to have very low residual shear strengths, which can have significant impact on slope stability. Unstable slopes pose a safety threat to the public and may require costly maintenance and repair.

Embankment Settlement: The roadway profile indicates up to 35 feet of embankment fill is required in order to establish the proposed grades in the existing low-lying median areas of I-95. These low-lying areas have the potential for having high water tables and soft soil deposits. Placement of fills over such areas can cause both slope stability and settlement risks. Settlement of embankment fills have the potential to extend the duration of construction and increase costs, and unanticipated settlement could create future maintenance and safety issues for the roadway. Additionally, drainage structures in these areas which connect pipes under north and southbound roadways will experience differential settlement.

Unsuitable Subgrade Materials: Prior to placement of embankment fill and pavement, the proposed subgrade soils will need to be evaluated for suitability. As noted, the vast majority of the project alignment is within the Potomac Formation, which often contains highly plastic soils (CH and MH). Highly plastic soils are potentially expansive with low strengths and are not suitable for use as pavement subgrades. Removal and replacement of unsuitable materials would increase trucks entering and exiting the project site and present traffic and safety impacts for the travelling public. It also has the potential to extend the duration of construction and increase costs.

Acidic Soils: Acid-sulfate soils are prevalent in this region. In an undisturbed state below the water table, these soils are generally not acidic. However, if the soils are exposed to air by lowering of the water table or excavation, the sulfides will react with oxygen to form sulfuric acid. The acid can create a variety of adverse impacts to drainage or retaining structures as well as inhibit the growth of vegetation which will ultimately cause the slopes to erode.

Risk Mitigation Strategies: Understanding these risks and developing rational exploration and design strategies are key tools that will be employed to mitigate these risks. The first step in mitigating most risks is having the right people/companies involved. The LANE Team includes DMY Engineering Consultants Inc. (DMY) as the geotechnical consultant. DMY has considerable design experience in this geology. DMY's experience, along with LANE's and RDA's, will be essential to the successful management and mitigation of this risk.

Slope Stability: A well planned subsurface exploration program is essential to slope stability. In addition to standard penetration test (SPT) borings, undisturbed soil sampling and laboratory testing will be performed on each of the subsurface strata affecting the slope stability. The sampling and testing program will particularly focus on the highly plastic Potomac soils, which could be problematic. Residual shear strengths will be determined for these soils in evaluating the long term stability of cut slopes. With adequate subsurface characterization and site specific knowledge of the soil strength, appropriate slope design can be achieved and risks can be minimized.

In some cases, the standard 2H:1V slopes might not be stable for deep cut and fill areas and, without improvements, flatter slopes could be required. In order to stabilize and/or steepen slopes, a number of design approaches are available, such as reinforcement, piles or walls, using select fill materials, lowering groundwater, using stabilizing berms, etc. Proper evaluation of soil strength and accurate characterization of the subsurface conditions combined with safe and effective design will mitigate the risk of slope failure.

RDA recently dealt with marine clay stability issues on their Heritage Center Parkway D-B project at the Marine Corp Museum located along I-95 in Prince William County where slopes were laid back at 4:1 slopes to mitigate slope failures.

Embankment Settlement: Laboratory consolidation testing will be performed on undisturbed soil samples in order to accurately determine the magnitude and the time rate of settlement under the embankment loads. A 3D settlement computer program will be utilized to establish models and evaluate the embankment settlement performance. The advanced 3D modeling can eliminate the conservative assumptions of the conventional 2D modeling.

If settlement is determined to be an issue, a number of mitigation measures may be employed. First, a settlement monitoring program will be implemented. The project construction will be planned such that the pavement would be constructed toward the end of the project after monitoring confirms that the consolidation settlements reach to a point that future settlement will be within the safe and allowable range. If determined necessary, surcharging embankment fills will be implemented to induce/accelerate the settlement. This approach may be critical in areas where drainage pipes are required to convey water from one side of I-95 to the other. There are approximately 7 locations along the project where cross drainage must be connected through the median.

Unsuitable Subgrade Materials: Following the completion of a design level geotechnical investigation to characterize the onsite soils, a soils remediation plan will be developed prior to the commencement of construction. The plan may include undercut/replacement, drying/scarification, and lime/cement stabilization. Potential borrow sources will be identified and approved by VDOT prior to the start of construction to provide suitable fill material for the roadway fills and potential undercuts.

Acidic Soils: Identification of the presence of these soils can be determined through pH and acid-base accounting tests. The proposed cut areas should be targeted during the field exploration for testing. Soil treatment is generally required when the calcium carbonate demand exceeds 4.0 tons per 1,000 tons of soil as determined by acid-base accounting. Impacts of acidic soils can be addressed in design and construction by 1) covering the problem soil with a layer of neutral soil suitable for vegetation growth, 2) mixing lime with the problem soil for pH conditioning, and 3) controlling run-off from potential acidic soils during construction.

Role of VDOT and other Agencies: Our geotechnical engineer will engage VDOT's geotechnical and materials engineers in discussions during the early stages of the design process to reach consensus on geotechnical recommendations. VDOT's input will be requested in identifying preferred methods of risk mitigation.

ATTACHMENT 3.1.2
SOQ CHECKLIST

ATTACHMENT 3.1.2

Project: 0095-969-720

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Offerors shall furnish a copy of this Statement of Qualifications (SOQ) Checklist, with the page references added, with the Statement of Qualifications.

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15-page limit?	SOQ Page Reference
Statement of Qualifications Checklist and Contents	Attachment 3.1.2	Section 3.1.2	no	Appendix Attachment 3.1.2
Acknowledgement of RFQ, Revision and/or Addenda	Attachment 2.10 (Form C-78-RFQ)	Section 2.10	no	Appendix Attachment 2.10
Letter of Submittal (on Offeror's letterhead)				
Authorized Representative's signature	NA	Section 3.2.1	yes	Page 2
Offeror's Point of Contact information	NA	Section 3.2.2	yes	Page 1
Principal Officer information	NA	Section 3.2.3	yes	Page 2
Offeror's corporate structure	NA	Section 3.2.4	yes	Page 2
Identity of Lead Contractor and Lead Designer	NA	Section 3.2.5	yes	Page 2
Affiliated/subsidiary companies	Attachment 3.2.6	Section 3.2.6	no	Appendix Attachment 3.2.6
Debarment forms	Attachment 3.2.7(a) Attachment 3.2.7(b)	Section 3.2.7	no	Appendix Attachment 3.2.7(a) & 3.2.7(b)
Offeror's VDOT prequalification evidence	NA	Section 3.2.8	no	Page 2 & Appendix
Evidence of obtaining bonding	NA	Section 3.2.9	no	Page 2

ATTACHMENT 3.1.2

Project: 0095-969-720

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
SCC and DPOR registration documentation (Appendix)	Attachment 3.2.10	Section 3.2.10	no	
Full size copies of SCC Registration	NA	Section 3.2.10.1	no	Appendix Attachment 3.2.10.1
Full size copies of DPOR Registration (Offices)	NA	Section 3.2.10.2	no	Appendix Attachment 3.2.10.2
Full size copies of DPOR Registration (Key Personnel)	NA	Section 3.2.10.3	no	Appendix Attachment 3.2.10.3
Full size copies of DPOR Registration (Non-APELSCIDLA)	NA	Section 3.2.10.4	no	Appendix Attachment 3.2.10.4
DBE statement within Letter of Submittal confirming Offeror is committed to achieving the required DBE goal	NA	Section 3.2.11	yes	Page 2
Offeror's Team Structure				Pages 3-7
Key Personnel Resume – DB Project Manager	Attachment 3.3.1	Section 3.3.1.1	no	Appendix Attachment 3.3.1
Key Personnel Resume – Quality Assurance Manager	Attachment 3.3.1	Section 3.3.1.2	no	Appendix Attachment 3.3.1
Key Personnel Resume – Design Manager	Attachment 3.3.1	Section 3.3.1.3	no	Appendix Attachment 3.3.1
Key Personnel Resume – Construction Manager	Attachment 3.3.1	Section 3.3.1.4	no	Appendix Attachment 3.3.1

ATTACHMENT 3.1.2

Project: 0095-969-720

STATEMENT OF QUALIFICATIONS CHECKLIST AND CONTENTS

Statement of Qualifications Component	Form (if any)	RFQ Cross reference	Included within 15- page limit?	SOQ Page Reference
Key Personnel Resume – ITS/Electrical Manager	Attachment 3.3.1	Section 3.3.1.5	no	Appendix Attachment 3.3.1
Organizational chart	NA	Section 3.3.2	yes	Page 4
Organizational chart narrative	NA	Section 3.3.2	yes	Pages 4-7
Experience of Offeror's Team				Page 8
Lead Contractor Work History Form	Attachment 3.4.1(a)	Section 3.4	no	Appendix Attachment 3.4.1(a)
Lead Designer Work History Form	Attachment 3.4.1(b)	Section 3.4	no	Appendix Attachment 3.4.1(b)
Project Risk				
Identify and discuss three critical risks for the Project	NA	Section 3.5.1	yes	Pages 9-14

ATTACHMENT 2.10
FORM C-78-RFQ

ATTACHMENT 2.10**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**RFQ NO. C00T17210DB90PROJECT NO.: 0095-969-720**ACKNOWLEDGEMENT OF RFQ, REVISION AND/OR ADDENDA**

Acknowledgement shall be made of receipt of the Request for Qualifications (RFQ) and/or any and all revisions and/or addenda pertaining to the above designated project which are issued by the Department prior to the Statement of Qualifications (SOQ) submission date shown herein. Failure to include this acknowledgement in the SOQ may result in the rejection of your SOQ.

By signing this Attachment 2.10, the Offeror acknowledges receipt of the RFQ and/or following revisions and/or addenda to the RFQ for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

1. Cover letter of RFQ – January 4, 2016
(Date)
2. Cover letter of RFQ Addendum#1 – January 28, 2016
(Date)
3. Cover letter of _____
(Date)


SIGNATUREFebruary 8, 2016
DATERobert E. Watt
PRINTED NAMEPursuit Manager
TITLE

ATTACHMENT 3.2.6
AFFILIATED AND SUBSIDIARY COMPANIES
OF THE OFFEROR

ATTACHMENT 3.2.6

State Project No. 0095-969-720

Affiliated and Subsidiary Companies of the Offeror

Offerors shall complete the table and include the addresses of affiliates or subsidiary companies as applicable. By completing this table, Offerors certify that all affiliated and subsidiary companies of the Offeror are listed.

<input type="checkbox"/> The Offeror does not have any affiliated or subsidiary companies.
<input checked="" type="checkbox"/> Affiliated and/ or subsidiary companies of the Offeror are listed below.

Relationship with Offeror (Affiliate or Subsidiary)	Full Legal Name	Address
ULTIMATE PARENT COMPANY	Salini Impregilo, S.p.A.	Via dei Missaglia, 97 – 20142 Milano, Italy
PARENT COMPANY	Lane Industries Incorporated	90 Fieldstone Court Cheshire CT 06410
AFFILIATE	Lane Worldwide Infrastructure, Inc.	90 Fieldstone Court Cheshire CT 06410
AFFILIATE	Lane Infrastructure, Inc.	90 Fieldstone Court Cheshire, CT 06410
AFFILIATE	Lane International, B.V.	Prins Bernhardplein 200 1097 JB Amsterdam, the Netherlands
AFFILIATE	Lane Mideast Contracting, LLC	P.O. Box 35243 Abu Dhabi, UAE Makeen Tower Corner of 9th and 10th Streets
AFFILIATE	Lane Mideast, Qatar, LLC	Grand Hamad Street Bin Al Sheikh Bldg. 3rd Floor Doha, Qatar
AFFILIATE	S.A. Healy Company	901 N. Green Valley Parkway, Suite 260 Henderson, NV 89074
SUBSIDIARY	Lanecon Corporation	90 Fieldstone Court Cheshire, CT 06410
SUBSIDIARY	Wardwell Family Realty, LLC	90 Fieldstone Court Cheshire, CT 06410

ATTACHMENT 3.2.6

State Project No. 0095-969-720

Affiliated and Subsidiary Companies of the Offeror

JOINT VENTURE (30% PARTNER)	Skanska-Granite-Lane	295 Bendix Road, Suite 400 Virginia Beach, VA 23452
JOINT VENTURE (30% PARTNER)	I4 Leasing, LLC	295 Bendix Road, Suite 400 Virginia Beach, VA 23452
JOINT VENTURE (35% PARTNER)	Fluor-Lane 95, LLC	6700 Las Colinas Blvd. Irving, TX 75039
JOINT VENTURE (20% PARTNER)	AGL Constructors	929 West Adams Street Chicago, IL 60607
JOINT VENTURE (25% PARTNER)	Gemma-Lane Liberty Partners	769 Hebron Avenue Glastonbury, CT 06033
JOINT VENTURE (25% PARTNER)	Gemma-Lane Patriot Partners	769 Hebron Avenue Glastonbury, CT 06033
JOINT VENTURE (51% MANAGING PARTNER)	Lane-Abrams Joint Venture	3001 Meacham Boulevard, Suite 215 Fort Worth, TX 76137
JOINT VENTURE (60% MANAGING PARTNER)	Lane-Corman, A Joint Venture	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Civil Wall Solutions, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Cold River Materials, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Prestress of the Carolinas, A Division of the Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Senate Asphalt, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Virginia Paving Company, A Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410
TRADE NAME	Virginia Sign and Lighting Company, Division of The Lane Construction Corporation	90 Fieldstone Court Cheshire, CT 06410

ATTACHMENT 3.2.7(a)
DEBARMENT FORM- PRIMARY COVERED
TRANSACTIONS

ATTACHMENT NO. 3.2.7(a)

**CERTIFICATION REGARDING DEBARMENT
PRIMARY COVERED TRANSACTIONS**

Project No.: 0095-969-720

1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.


b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; and have not been convicted of any violations of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1) b) of this certification; and

d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	February 8, 2016	Pursuit Manager
Signature	Date	Title

The Lane Construction Corporation

Name of Firm

ATTACHMENT 3.2.7(b)
DEBARMENT FORM- LOWER TIER COVERED
TRANSACTIONS

ATTACHMENT NO. 3.2.7(b)

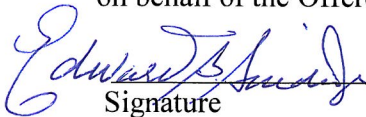
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-969-720

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.



Signature

2/6/2016
Date

CEO/Chairman of the Board
Title

Rinker Design Associates, P.C.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS

Project No.: 0095-969-720

1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	1/29/16	Vice President & CEO
Signature	Date	Title

Sabra Wang & Associates, Inc.

Name of Firm

ATTACHMENT NO. 3.2.7(b)

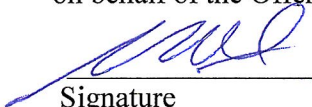
**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-969-720

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	2-3-16	Vice President
Signature	Date	Title

DMY Engineering Consultants Inc.

Name of Firm

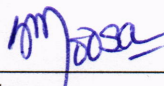
ATTACHMENT NO. 3.2.7(b)

**CERTIFICATION REGARDING DEBARMENT
LOWER TIER COVERED TRANSACTIONS**

Project No.: 0095-969-720

- 1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this form.

The undersigned makes the foregoing statements to be filed with the proposal submitted on behalf of the Offeror for contracts to be let by the Commonwealth Transportation Board.

	2/4/2016	Principal Engineer
Signature	Date	Title

Engineering & Materials Technologies, Inc. (E.M.Tech)
Name of Firm

ATTACHMENT 3.2.8
VDOT PREQUALIFIED SUPPORTING
DOCUMENTATION



COMMONWEALTH OF VIRGINIA



CERTIFICATE OF QUALIFICATION

THE LANE CONSTRUCTION CORPORATION

Vendor Number: **L002**

In accordance with the Regulations of the Virginia Department of Transportation, your firm is hereby notified that the following Rating has been assigned to your firm:

PREQUALIFIED

Your firm specializes in the noted Classification(s):

GRADING; MAJOR STRUCTURES; ASPHALT CONCRETE PAVING;
PORTLAND CEMENT CONCRETE PAVING; MINOR STRUCTURES; UNDERGROUND UTILITIES

Issue Date: June 30, 2015

This Rating and Classification will Expire: June 30, 2016

A handwritten signature in blue ink, appearing to read "Suzanne FR Lucas", written over a horizontal line.

Suzanne FR Lucas, State Prequalification Officer

A handwritten signature in blue ink, appearing to read "Don E. Silies", written over a horizontal line.

Don E. Silies, Director of Contracts

It is not permissible to alter this document, use after posted expiration date, or use by persons or firms other than those named on this certificate.

ATTACHMENT 3.2.9
SURETY LETTER

***Zurich American Insurance Company
Fidelity and Deposit Company of Maryland
Liberty Mutual Insurance Company***

January 28, 2016

Commonwealth of Virginia
Department of Transportation
1401 East Broad Street
Richmond, VA 23219

RE: **The Lane Construction Corporation
Request for Qualifications
Design-Build Project - I-95 Express Lanes—Southern Terminus Extension, From: 0.9 mi. South of the
Garrisonville Road Overpass To: 1.3 mi. North of the Garrisonville Road Overpass (Current Terminus
of the Express Lanes), Stafford County, Virginia; State Project No.: 0095-969-720
Contract ID Number: C00T17210DB90
Estimated Contract Price: \$40,000,000.00**

To Whom It May Concern:

This letter will serve to confirm that The Lane Construction Corporation is a highly regarded and valued client of the sureties, Zurich American Insurance Company (A.M. Best Financial Strength Rating of A+/Superior and Financial Size Category XV), Fidelity and Deposit Company of Maryland (A.M. Best Financial Strength Rating of A+/Superior and Financial Size Category XV) and Liberty Mutual Insurance Company (A.M. Best Financial Strength Rating of A/Excellent and Financial Size Category XV), the 'co-sureties'. Each surety company is licensed to conduct surety business in the Commonwealth of Virginia, and each surety company holds a Certificate of Authority as listed in the Department of the Treasury's Listing of Approved Sureties (Department Circular 570) dated July 1, 2015.

As the sureties for The Lane Construction Corporation, we advise that The Lane Construction Corporation is capable of obtaining 100% Performance Bond and 100% Labor and Materials Payment Bond in the amount of the anticipated cost of construction, and said bonds will cover the Project and any warranty periods as provided for in the Contract Documents on behalf of the Contractor, in the event that such firm be the successful bidder and enter into a contract for this Project.

Naturally, as is customary within the surety industry, the issuance of any bonds is contingent upon a favorable underwriting review of project specifics including, but not limited to, the contract terms, conditions, documents, bond forms and confirmation of complete project financing by both The Lane Construction Corporation and its co-sureties at the time a request for bonds is made. We assume no liability to third parties or to you by issuance of this letter, should bid or final bonds not be issued.

Should you need additional assurance regarding the technical ability or bonding capacity of The Lane Construction Corporation, please do not hesitate to contact this office.

Sincerely,

Zurich American Insurance Company
Fidelity and Deposit Company of Maryland
Liberty Mutual Insurance Company



Theresan E. Rowedder
Attorney-in-Fact

Aon Risk Services
One Federal Street, 20th Floor
Boston, MA 02110
860-830-1769

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **THOMAS O. MCCLELLAN, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Kevin A. WHITE, Mark P. HERENDEEN, Jean CORREIA, Maria CHAVES, Theresan E. ROWEDDER, Bryan HUFT, Jeffrey HENDRICKS and Jane GILSON**, all of Boston, Massachusetts, **EACH** its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said **ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND**, this 26th day of August, A.D. 2015.

ATTEST:

**ZURICH AMERICAN INSURANCE COMPANY
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY
FIDELITY AND DEPOSIT COMPANY OF MARYLAND**



By: _____

Eric D. Barnes
Secretary
Eric D. Barnes

Thomas O. McClellan

Vice President
Thomas O. McClellan

State of Maryland
County of Baltimore

On this 26th day of August, A.D. 2015, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, **THOMAS O. MCCLELLAN, Vice President, and ERIC D. BARNES, Secretary**, of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Maria D. Adamski

Maria D. Adamski, Notary Public
My Commission Expires: July 8, 2019



EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 28th day of JANUARY, 2016.



A handwritten signature in black ink, appearing to read "Michael Bond".

Michael Bond, Vice President

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

Certificate No. 7205060

American Fire and Casualty Company
The Ohio Casualty Insurance Company

Liberty Mutual Insurance Company
West American Insurance Company

POWER OF ATTORNEY

KNOWN ALL PERSONS BY THESE PRESENTS: That American Fire & Casualty Company and The Ohio Casualty Insurance Company are corporations duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Brian Driscoll; Bryan Huft; Gregory J. Steele; Jane Gilson; Jean Correia; Jeffrey Hendricks; Kevin A. White; Maria Chaves; Mark P. Herendeen; Theresan E. Rowedder

all of the city of Boston, state of MA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 11th day of December, 2015.



STATE OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

American Fire and Casualty Company
The Ohio Casualty Insurance Company
Liberty Mutual Insurance Company
West American Insurance Company

By: David M. Carey
David M. Carey, Assistant Secretary

On this 11th day of December, 2015, before me personally appeared David M. Carey, who acknowledged himself to be the Assistant Secretary of American Fire and Casualty Company, Liberty Mutual Insurance Company, The Ohio Casualty Insurance Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Teresa Pastella, Notary Public
Plymouth Twp., Montgomery County
My Commission Expires March 28, 2017
Member, Pennsylvania Association of Notaries

By: Teresa Pastella
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS – Section 12. Power of Attorney. Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts – SECTION 5. Surety Bonds and Undertakings. Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes David M. Carey, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Gregory W. Davenport, the undersigned, Assistant Secretary, of American Fire and Casualty Company, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 28th day of JANUARY, 2016.



By: Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

To confirm the validity of this Power of Attorney call
1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

Not valid for mortgage, note, loan, letter of credit,
currency rate, interest rate or residual value guarantees.

ATTACHMENT 3.2.10
SCC AND DPOR INFORMATION

ATTACHMENT 3.2.10

State Project No. 0606-088-653, C501 & 0606-088-622, C501, B634

SCC and DPOR Information

Offerors shall complete the table and include the required state registration and licensure information. By completing this table, Offerors certify that their team complies with the requirements set forth in Section 3.2.10 and that all businesses and individuals listed are active and in good standing.

SCC & DPOR INFORMATION FOR BUSINESSES (RFQ Sections 3.2.10.1 and 3.2.10.2)							
Business Name	SCC Information (3.2.10.1)			DPOR Information (3.2.10.2)			
	SCC Number	SCC Type of Corporation	SCC Status	DPOR Registered Address	DPOR Registration Type	DPOR Registration Number	DPOR Expiration Date
The Lane Construction Corporation	F0254476	Foreign Corporation	Active	90 Fieldstone Court Cheshire, CT 06410	Contractor Class A	2701011871	01-31-2018
				90 Fieldstone Court Cheshire, CT 06410	Business Entity Registration	0407002174	12-31-2017
				14500 Avion Pkwy, Suite 200 Chantilly, VA 20151	Business Entity Branch Office Registration	0411000988	02-29-2016
Rinker Design Associates, P.C.	0227062-7	Professional Corporation	Active	9385 Discovery Blvd, Ste 200, Manassas, VA 20109	Professional Corporation (ENG, LS)	0405000502	12-31-2017
					Real Estate Appraisal Business	4008001684	02-28-2017
				927 Maple Grove Dr, Ste 105 Fredericksburg, VA 22407	Prof. Corp. Branch Office (ENG, LS)	0410000156	02-29-2016
					Real Estate Appraisal Business	4008001739	04-30-2016
				4301 Dominion Blvd, Ste 100 Glen Allen, VA 23060	Prof. Corp. Branch Office (ENG)	0410000220	02-29-2016
					Real Estate Appraisal Business	4008001801	04-30-2016
Sabra, Wang & Associates, Inc.	F1343203	Foreign Corporation	Active	101 W Broad St., Suite 301, Falls Church, VA 22046	Business Entity Registration	0407005636	12-31-2017

ATTACHMENT 3.2.10

State Project No. 0606-088-653, C501 & 0606-088-622, C501, B634

SCC and DPOR Information

				7055 Samuel Morse Drive, Suite 100 Columbia, MD 21046	Business Entity Branch Office Registration	0411000839	02-29-2016
DMY Engineering Consultants, Inc.	07688955	Corporation	Active	45662 Terminal Dr, Ste 110 Dulles, VA 20166	Business Entity (ENG)	0407005631	12-31-2017
Engineering & Materials Technologies, Inc.	04786331	Corporation	Active	7857 Coppermine Dr, Manassas, VA 20109	Business Entity Registration	0407005994	12-31-2017

DPOR INFORMATION FOR INDIVIDUALS (RFQ Sections 3.2.10.3 and 3.2.10.4)

Business Name	Individual's Name	Office Location Where Professional Services will be Provided (City/State)	Individual's DPOR Address	DPOR Type	DPOR Registration Number	DPOR Expiration Date
Rinker Design Associates, P.C.	Steven Scott Shropshire	Fredericksburg/VA	Fredericksburg, VA 22407	Professional Engineer License	0402035812	06-30-2017
Rinker Design Associates, P.C.	John A Giometti	Fredericksburg/VA	Culpeper, VA 22701	Professional Engineer License	0402032300	07-31-2016
Sabra, Wang & Associates, Inc.	William Frank Monroe	Falls Church/VA	Roanoke, VA 24018	Tradesman/ Master Electrician (MELE)	2710020167	02-28-2017

ATTACHMENT 3.2.10.1
SCC SUPPORTING DOCUMENTATION



SCC eFile

[SCC eFile Home Page](#)
[Check Name](#)
[Distinguishability](#)
[Business Entity Search](#)
[Certificate Verification](#)
[FAQs](#)
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Business Entities

UCC or Tax Liens

THE LANE CONSTRUCTION CORPORATION

General

SCC ID: F0254476
Entity Type: Foreign Corporation
Jurisdiction of Formation: CT
Date of Formation/Registration: 7/24/1972
Status: Active
Shares Authorized: 11700



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Business Entities

UCC or Tax Liens

Rinker Design Associates, P.C.

General

SCC ID: 02270627
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 2/24/1982
Status: Active
Shares Authorized: 20000



SCC eFile

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Business Entities

UCC or Tax Liens

SABRA, WANG & ASSOCIATES, INC.

General

SCC ID: F1343203
Entity Type: Foreign Corporation
Jurisdiction of Formation: MD
Date of Formation/Registration: 6/30/1998
Status: Active
Shares Authorized: 5000



SCC eFile

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Business Entities

UCC or Tax Liens

DMY ENGINEERING CONSULTANTS INC.

General

SCC ID: 07688955
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 9/6/2013
Status: Active
Shares Authorized: 10000



ENGINEERING & MATERIALS TECHNOLOGIES, INC.

SCC eFile

[SCC eFile Home Page](#)
[Check Name](#)
[Distinguishability](#)
[Business Entity Search](#)
[Certificate Verification](#)
[FAQs](#)
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Business Entities

UCC or Tax Liens

General

SCC ID: 04786331
Entity Type: Corporation
Jurisdiction of Formation: VA
Date of Formation/Registration: 1/29/1997
Status: Active
Shares Authorized: 5000

ATTACHMENT 3.2.10.2
DPOR SUPPORTING DOCUMENTATION
FOR EACH OFFICE

DPOR License Lookup License Number 2701011871

License Details

Name	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
DBA Name	VA PAVING COMPANY / VA SIGN AND LIGHTING COMPANY
License Number	2701011871
License Description	Contractor
Firm Type	Corporation
Rank ¹	Class A
Address	90 FIELDSTONE COURT, CHESHIRE, CT 06410
Specialties²	Commercial Building (CBC) Highway / Heavy (H/H) Residential Building (RBC)
Initial Certification Date	1972-10-12
Expiration Date	2018-01-31

DPOR License Lookup License Number 0407002174

License Details

Name	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
License Number	0407002174
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	90 FIELDSTONE COURT, CHESHIRE, CT 06410
Initial Certification Date	1985-09-30
Expiration Date	2017-12-31

DPOR License Lookup License Number 0411000988

License Details

Name	THE LANE CONSTRUCTION CORPORATION / SENATE ASPHALT
License Number	0411000988
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	14500 AVION PKWY SUITE 200, CHANTILLY, VA 20151
Initial Certification Date	2013-04-18
Expiration Date	2016-02-29

DPOR License Lookup License Number 0405000502

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0405000502
License Description	Professional Corporation Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation
Address	9385 DISCOVERY BOULEVARD, STE 200, MANASSAS, VA 20109
Initial Certification Date	1986-07-16
Expiration Date	2017-12-31

DPOR License Lookup License Number 4008001684

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	4008001684
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	9385 DISCOVERY BOULEVARD SUITE 200, MANASSAS, VA 20109
Initial Certification Date	2011-02-10
Expiration Date	2017-02-28

DPOR License Lookup License Number 0410000156

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0410000156
License Description	Professional Corporation Branch Office Registration
Rank	Professional Corporation Branch Office
Address	927 MAPLE GROVE DR STE 105, FREDERICKSBURG, VA 22407
Initial Certification Date	2005-12-27
Expiration Date	2016-02-29

DPOR License Lookup License Number 4008001739

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	4008001739
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	927 MAPLE GROVE DR STE 105, FREDERICKSBURG, VA 22407
Initial Certification Date	2012-04-30
Expiration Date	2016-04-30

DPOR License Lookup License Number 0410000220

License Details

Name	RINKER DESIGN ASSOCIATES PC
License Number	0410000220
License Description	Professional Corporation Branch Office Registration
Firm Type	PC - Professional Corporation
Rank	Professional Corporation Branch Office
Address	4301 DOMINION BOULEVARD, SUITE 100, GLEN ALLEN, VA 23060
Initial Certification Date	2011-03-17
Expiration Date	2016-02-29

DPOR License Lookup License Number 4008001801

License Details

Name	RINKER DESIGN ASSOCIATES P C
License Number	4008001801
License Description	Appraisal Business Registration
Firm Type	Corporation
Rank	Business Entity
Address	4301 DOMINION BOULEVARD SUITE 100, GLEN ALLEN, VA 23060
Initial Certification Date	2014-04-10
Expiration Date	2016-04-30

DPOR License Lookup License Number 0407005636

License Details

Name	SABRA, WANG & ASSOCIATES, INC
License Number	0407005636
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	101 W BROAD ST SUITE 301, FALLS CHURCH, VA 22046
Initial Certification Date	2010-03-12
Expiration Date	2017-12-31

DPOR License Lookup License Number 0411000839

License Details

Name	SABRA, WANG & ASSOCIATES, INC
License Number	0411000839
License Description	Business Entity Branch Office Registration
Business Type	Corporation
Rank	Business Entity Branch Office
Address	7055 SAMUEL MORSE DRIVE SUITE 100, COLUMBIA, MD 21046
Initial Certification Date	2011-06-17
Expiration Date	2016-02-29

DPOR License Lookup License Number 0407005631

License Details

Name	DMY ENGINEERING CONSULTANTS INC
License Number	0407005631
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	45662 TERMINAL DRIVE SUITE 110, DULLES, VA 20166
Initial Certification Date	2010-03-10
Expiration Date	2017-12-31

DPOR License Lookup License Number 0407005994

License Details

Name	ENGINEERING & MATERIALS TECHNOLOGIES, INC
License Number	0407005994
License Description	Business Entity Registration
Firm Type	Corporation
Rank	Business Entity
Address	7857 COPPERMINE DR, MANASSAS, VA 20109
Initial Certification Date	2011-12-08
Expiration Date	2017-12-31

ATTACHMENT 3.2.10.3
DPOR SUPPORTING DOCUMENTATION
FOR KEY PERSONNEL

DPOR License Lookup License Number 0402035812

License Details

Name	SHROPSHIRE, STEVEN SCOTT
License Number	0402035812
License Description	Professional Engineer License
Rank	Professional Engineer
Address	FREDERICKSBURG, VA 22407
Initial Certification Date	2005-06-10
Expiration Date	2017-06-30

DPOR License Lookup License Number 0402032300

License Details

Name	GIOMETTI, JOHN A
License Number	0402032300
License Description	Professional Engineer License
Rank	Professional Engineer
Address	CULPEPER, VA 22701
Initial Certification Date	1998-07-16
Expiration Date	2016-07-31

ATTACHMENT 3.2.10.4
DPOR SUPPORTING DOCUMENTATION
FOR NON-APELSCIDLA REGULATED SERVICES

DPOR License Lookup License Number 2710020167

License Details

Name	MONROE, WILLIAM FRANK
License Number	2710020167
License Description	Tradesman
Rank	Tradesman
Address	ROANOKE, VA 24018
Specialties¹	Master Electrician (MELE)
Initial Certification Date	1995-07-21
Expiration Date	2017-02-28

ATTACHMENT 3.3.1
KEY PERSONNEL RESUMES

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: KENNETH PRINCE, PE, DISTRICT MANAGER	
b. Project Assignment: DESIGN-BUILD PROJECT MANAGER	
c. Name of Firm with which you are now associated: THE LANE CONSTRUCTION CORPORATION	
d. Employment History: With this Firm <u>13</u> Years With Other Firms <u>7</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): The Lane Construction Corporation, 2001-Present. Mr. Prince, a licensed PE in Virginia, serves as the Project Manager for LANE for various DB projects in the Mid-Atlantic region ranging from \$7M to \$726M. He is responsible for overall management of the design, construction, quality, and contract administration on these projects. He provides strategic planning and execution for projects, leads a team of project and construction managers, and works with design and construction teams on innovative techniques and means and methods to execute projects. He organizes and assigns equipment, personnel, and subcontractors to execute each project. He leads and implements safety initiatives, establishes project objectives, policies, procedures and performance standards, sets and monitors budgets, and assures that a quality management system is in place. The Lane Construction Corporation, 2003-2010. As Project Manager/Engineer, Mr. Prince was responsible for the operation of all transportation construction operations, safety, QA/QC programs for LANE's Mid-Atlantic region. He supervised work crews and subcontractors on projects for interstate construction, utility relocation, major concrete paving, bridges, earthwork, and environmental controls. Washington Group International, 2001-2002. As Construction Engineer/Superintendent, Mr. Prince was responsible for construction operations, scheduling of work crews and subcontractors, safety and quality programs and construction plans.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: University of Michigan, Ann Arbor, MI / B.S. / 1996 / Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2009/Professional Engineer/VA #0402044906	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)	
VDOT, I-95 Express Lanes, Fairfax, Prince William, and Stafford Counties, VA (DESIGN-BUILD)	
Name of Firm: The Lane Construction Corporation	Project Role: District Manager
Beginning Date: January 2012	End Date: March 2015
Specific Responsibilities: As the direct supervisor of the Deputy Project Director of Construction on this project, Mr. Prince was responsible for the overall construction operations, adherence to technical requirements, and contract administration for this \$732M D-B/P3 project. He was responsible for providing the resources necessary to execute the project, scheduled progress of the construction deliverables, and ensuring that the safety and quality system standards were upheld.	
Project Relevance: This \$726M D-B project created 29 miles of Express Lanes on I-95 from Alexandria to Stafford. A 9-mile, reversible, two-lane extension of the existing HOV lanes helps alleviate some of the worst traffic on one of the most heavily travelled and congested urban corridors in the United States. Other similar scope of work items to the I-95 Southern Extension project include: interstate widening, poor soils mitigations, significant environmental efforts; geotechnical explorations; storm drain; traffic control devices; ITS devices/systems; TMP; noise walls; survey, ROW; utilities; QA/QC; construction engineering and inspection; and project management. Like the I-95 Express Lanes – Southern Terminus Extension project, the I-95 Express Lanes included extensive MOT plans, utility relocation efforts (including past identification and data gathering), review of design concepts against existing utilities, determination of mitigation measures, and ongoing coordination with utility companies. The project involved comprehensive public relations with over 365 outreach meetings held during the course of the project. The project received ARTBA's Safest Project of the Year, ENR's Project of the Year in the Mid-Atlantic, and P3 Highway Project of the Year finalist. <i>Worked with proposed CM Brian Basnight, Mike Leitch, Chris Monahan, Shane Smith, Mo Kim, and Song Kim.</i>	
VDOT, I-95 Shoulder and Auxiliary Lanes Improvements, Prince William County, VA	
Name of Firm: The Lane Construction Corporation	Project Role: District Manager
Beginning Date: January 2013	End Date: August 2015

Specific Responsibilities: Mr. Prince was responsible for directing and managing the project management team, procurement and contract administration, overall safety and quality control programs adherence to contractual requirements and specifications, collaborating with senior management and stakeholders, scheduling project timelines and milestones, supervising team members, and construction execution. Mr. Prince was also responsible for the coordination of the public outreach and public meetings.

Project Relevance: The project consisted of approximately 7 miles in length and the scope of work included 100,000 cy of excavation, 170,000 tons of asphalt paving, 10 miles of guardrail, and major maintenance of traffic (MOT) activities. Other activities include pavement markings, erosion and sediment (E&S) control and monitoring measures, demolition, 11 overhead sign structures, installation of concrete retaining walls, temporary and permanent drainage. The ITS scope of work included the installation of new, modification of existing, and integration of the system into the existing network. **Worked with proposed Shane Smith.**

VDOT, I-64/I-264 Pavement Rehabilitation, Norfolk, VA (DESIGN-BUILD)

Name of Firm:	The Lane Construction Corporation	Project Role:	Design-Build Project Manager
Beginning Date:	January 2014	End Date:	November 2015

Specific Responsibilities: Mr. Prince was responsible for the management of this D-B project which includes the project design, construction, quality management, safety program, and contract administration. He facilitated communication among team partners, efficiently designated resources to ensure timely delivery, coordinated with personnel on adjacent projects, and procured and furnished the materials, equipment, services and labor necessary for project completion. Mr. Prince's interactions from design through construction included leading project meetings to discuss all aspects of the project, verifying that VDOT specifications were followed in design through construction, and participated in constructability reviews. He addressed issues with the proper personnel and VDOT; and had continuous interaction with the QAM to ensure project compliance. Mr. Prince was also responsible for the coordination of the public outreach and public meetings.

Project Relevance: This \$32M D-B project located in an urban/commercial area consists of the rehabilitation on approximately 10.2 miles of Interstates 64 and 264 in Norfolk. This project has many similar scope elements as the I-95 Southern Extension project: heavy MOT in high traffic volumes, pavement repairs, traffic control devices; ITS devices/systems; TMP; survey; structures; environmental; hydraulics; QA/QC; construction engineering and inspection; and project management. The project also involved significant public relations including coordination and development of work-plans that incorporated Third Party availability and schedule requirements. **Worked with proposed CM Brian Basnight.**

VDOT, Route 29 Solutions, Charlottesville, VA (DESIGN-BUILD)

Name of Firm:	The Lane Construction Corporation	Project Role:	Design-Build Project Director
Beginning Date:	January 2015	End Date:	Present (est. 2017)

Specific Responsibilities: As the Design Build Project Director, Mr. Prince is responsible for project startup, directing and managing project development, design management, goals and deliverables, collaborating with senior management and stakeholders, scheduling project timelines and milestones, supervising team members, DBE outreach participation, and construction execution. Mr. Prince administered the contract, directed the project team (design and construction), and oversees safety and quality on this \$116M DB. He coordinated all resources necessary to execute the successful commencement and ongoing delivery of the project; monitored progress of the design/construction deliverables; supervised the procurement and furnishing of materials, equipment, services and labor; and ensured that safety and quality standards were upheld. He coordinated regularly with project partners, including the designer, VDOT, and key stakeholders, and negotiated and resolved contract terms.

Project Relevance: The \$116M fast tracked design build project consists of three major project elements. The Rio Road Intersection element will provide a grade separated depressed intersection with specialized SOE, retaining walls, and a bridge to move traffic more efficiently through the intersection of Route 29 and Rio Road, one of the most congested intersections on the corridor. The 29 Widening element will widen 1.8 miles of Route 29 from a 4-lane divided highway to a 6-lane divided highway by adding an additional lane on both sides of the roadway. The Berkmar Drive Extension element will extend Berkmar Drive north 2.3 miles. The project, which runs parallel to Route 29, includes a 800' long bridge spanning the South Fork Rivanna River to the west of the Route 29 bridges. **Working with proposed DM John Giometti, Mo Kim, Brian Komar, Chris Reed, Michael Short, Jon Bonghi, Bill Missell, Chris Calamos.**

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

N/A. Mr. Prince is not required on-site full-time.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: SCOTT SHROPSHIRE, P.E. / DIRECTOR OF CONSTRUCTION MANAGEMENT SERVICES, SOUTHERN REGION	
b. Project Assignment: QUALITY ASSURANCE MANAGER	
c. Name of Firm with which you are now associated: RINKER DESIGN ASSOCIATES, P.C.	
d. Employment History: With this Firm <u><1</u> Years With Other Firms <u>17</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Rinker Design Associates, P.C., April 2015-Present, Director of Construction Management Services, Southern Region. Mr. Shropshire leads and manages the engineering staff, contract management, quality assurance/quality control (QA/QC), and field inspection/review programs in the firm's Fredericksburg and Richmond offices. He also serves as QA/QC Manager in the field for traditional Design-Bid-Build (D-B-B) and D-B contract work. A. Morton Thomas & Associates, Inc., March 2014-April 2015, Associate-Quality Control Manager. As Quality Control Manager (QCM), Mr. Shropshire worked exclusively on D-B projects as QC lead. He was responsible for QC documentation, inspection, reporting, and testing of all materials used and work performed on projects. Virginia Department of Transportation, March 2004-March 2014, Fredericksburg District Area Construction Engineer. Mr. Shropshire was responsible for providing leadership and technical guidance for inspectors, construction managers, contract administration, and consultant staff in the delivery of the Six Year Improvement Program's highway construction segment via traditional D-B-B and D-B procurements. Johnson, Mirmiran & Thompson, Inc., 2001-May 2004, Traffic Engineer. As Traffic Engineer, Mr. Shropshire provided roadway and traffic engineering services as well as management on various transportation projects to multiple clients.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Military Institute, Lexington, VA / B.S. / 1996 / Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 2005 / Professional Engineer / #0402035812	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
US Route 1/Jefferson-Davis Highway Improvements at Ft. Belvoir, Fairfax County, VA (DESIGN-BUILD)	
Name of Firm: A. Morton Thomas & Associates, Inc.	Project Role: Quality Control Manager (QCM)
Beginning Date: March 2014	End Date: April 2015
Specific Responsibilities: As QCM, Mr. Shropshire was responsible for project QC inspection and testing, establishing and maintaining the Materials Register in accordance with the project QA/QC Manual, and coordinating and addressing RFIs and Shop Drawing Reviews for the widening of US Route 1. His role also included establishing and maintaining the SWPPP, coordination of all applicable permits, reviewing and maintaining project diaries and daily work reports, and generating and compiling weekly work reports for the QAM. Additional duties construction oversight of TMP, bridge demolition/replacement, pile driving, and drilled in caissons. Mr. Shropshire was also responsible for coordinating with the contractor (during design and construction), FHWA-EFLHD, VDOT, Fort Belvoir, Fairfax County, and utility companies to ensure that the design/construction requirements of the contract were met and to expedite the concurrence for associated services. Through coordination with QAM, FHWA-EFLHD, and VDOT, Mr. Shropshire assisted the contractor by providing field engineering decisions to address geotechnical concerns, storm sewer issues, and TMP conflicts as well as procedures to correct non-conforming construction work. In several cases, the field coordination resulted in plan revisions to correspond with field conditions and best means/methods of construction. Worked with DMY Engineering and Sabra, Wang & Associates.	
Project Relevance: Similar to the I-95 Express Lanes – Southern Extension Project, this \$75M D-B project consisted of the design and construction of roadway widening along a congested corridor with extensive earthwork, embankments, and sound walls. All work and materials as well as inspection, sampling, and testing were performed in accordance with the "Approved for Construction" plans, contract, and specifications. The project's complex TMP required significant integration of the roadway designers, as it encompassed multiple work areas, adjacent/intersecting roadways, and ingress/egress points for Fort Belvoir. Given the proximity of the projects, the geotechnical issues/concerns experienced with this project (unsuitable material, Potomac Clay, and acidic soils) are anticipated for the I-95 Express Lanes – Southern Terminus Extension Project. Extensive stakeholder coordination (including	

VDOT Mega Projects, VDOT Fredericksburg District, I-95 Express Lanes Concessionaire, and local governmental agencies) provides Mr. Shropshire with the direct understanding of the communication emphasis he will encounter on this project.

Truslow Road (Route 652) Reconstruction, Stafford County, VA (PPTA/DESIGN-BUILD)

Name of Firm: Rinker Design Associates, P.C.	Project Role: Quality Control Manager (QCM)
Beginning Date: May 2015	End Date: Ongoing (FFD: April 2016)

Specific Responsibilities: As QCM, Mr. Shropshire is responsible for the QC inspections for roadway construction ensuring conformance to the contract documents. He actively supervises the QC program through coordination of construction activities, planning of inspection requirements, and resources as well as the review of inspection and testing reports for compliance to plans, QA/QC Plan, and specifications. He conducts pre-start construction activity meetings with contractor and subcontractors to ensure their understanding of the scope of work, applicable specifications, and safety. He engages in the discussion and resolution of RFIs, providing constructability feedback for consideration by the contractor and design engineer of record. Mr. Shropshire also provides field engineering decisions (via recommendations offered to the QAM and VDOT Liaison) to assist the contractor in addressing differing site conditions (geotechnical), correcting non-conforming work, and alleviating adjacent property owner concerns/issues. He monitors TMP installations to ensure compliance with Work Area Protection Manual and reviews Erosion & Sediment Control Measure Inspections to guarantee compliance with DEQ specifications. He also ensures that the SWPPP is current in accordance with laws and regulations. Mr. Shropshire proactively coordinates with the D-B to ensure As-Built information is provided and incorporated to plan set. He maintains project diaries and test reports, providing record of work history and project quality for acceptance. These efforts and integration of design and construction resulted in stronger field coordination and rapid resolutions, leading to an improved alignment with the field conditions and best means/methods of construction. **Worked with EM Tech.**

Project Relevance: Similar to the I-95 Express Lanes – Southern Extension Project, this \$6.5M PPTA/D-B project consists of roadway construction on new alignment involving earthwork, embankment, subgrade and drainage improvements, and paving. Localized geotechnical issues consisting of unsuitable material, saturated soils, and Potomac clays required mitigation strategies to ensure a stabilized foundation for the roadway improvements. The TMP complexity on this project required significant coordination with the contractor, state and local governmental agencies, and other stakeholders and included field adjustments to simplify construction, minimize traffic disruption, and expedite schedule. As a value-added feature to accommodate corridor safety, adjacent property owner concerns, and project quality, the construction extended approximately 700 LF beyond the project limits to connect the current project and previous maintenance schedule work preventing the existence of an inadequate, unimproved section of Truslow Road between the two contract improved sections. Project communication and coordination with all impacted stakeholders has proved beneficial during intrusive work activities mitigating traffic confusion, congestion, and frustration while simultaneously producing project understanding and patience from adjacent property owners and the traveling public.

I-95/VA Route 207 Interchange Improvements, Caroline County, VA (DESIGN-BID-BUILD)

Name of Firm: VDOT	Project Role: Area Construction Engineer (ACE)
Beginning Date: June 2009	End Date: June 2011

Specific Responsibilities: As the Area Construction Engineer for this Federal Oversight project, Mr. Shropshire was responsible for the contract administration, construction, and QA inspections and testing as well as coordinating and addressing RFIs and Shop Drawing Reviews for the I-95/VA Route 207 Interchange Improvements. His role also included coordination of roadway design technical and construction issues, survey, ROW acquisition, and utility coordination. Additional project responsibilities included construction oversight of TMP, utility coordination, earthwork, subgrade and drainage improvements, paving, sign structures, and traffic engineering elements. During construction, he was responsible for coordinating with the contractor, FHWA, VDOT, Caroline County, utility companies, and adjacent business owners to ensure that the construction requirements of the contract were met and to provide updates to the FHWA Area Engineer on project concerns, issues, and progress. Additionally, Mr. Shropshire monitored the contractor's and subcontractor's QC program by reviewing inspection and test reports from his QA inspection staff. In addition to actively monitoring the inspection staff, he performed periodic evaluations of the project records at regular intervals. This review would include, but were not limited to, the Materials Notebook, Project Daily Work Reports, Force Accounts/Work Orders, and density reports. At the time of the invoice, missing documentation for identified pay items would be withheld until the documentation was received. Mr. Shropshire provided field engineering decisions to assist the contractor in addressing differing conditions as well as procedures to correct non-conforming construction elements.

Project Relevance: Similar to the I-95 Express Lanes – Southern Extension Project, this \$15M D-B-B project consisted of new alignment construction, coupled with roadway widening along a congested corridor involving on- and off- ramps to an interstate, and shoulder improvement along the interstate approach. Project work performed, but was not limited to, included roadway excavation, embankment, subgrade and drainage improvements, and adherence to VDOT specifications and standards. The TMP complexity on this project required significant integration of the roadway designers, as it encompassed both interchange operation (LOS), adjacent roadways, and local business entrances. The project involved multiple field adjustments to the TMP improving construction sequencing and simplifying the construction effort, minimize traffic disruption and expedite the construction schedule. The extensive coordination with the FHWA, VDOT, Caroline County, and local businesses provides a direct understanding of the issues that we will encounter on this Project.

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

N/A. Mr. Shropshire is not required onsite full-time.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: JOHN A. GIOMETTI, P.E. / ASSISTANT DIRECTOR OF TRANSPORTATION	
b. Project Assignment: DESIGN MANAGER	
c. Name of Firm with which you are now associated: RINKER DESIGN ASSOCIATES, P.C.	
d. Employment History: With this Firm <u>3</u> Years With Other Firms <u>24</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Rinker Design Associates, P.C., 2014-Present, Assistant Director of Transportation. Mr. Giometti is responsible for allocating, overseeing, and managing all designs performed/managed in the Fredericksburg Office, and all sub-consultants on those projects. Design elements managed include roadway design, hydrology/hydraulic analysis, traffic analysis and design, construction plan preparation, ROW acquisition, utility coordination/design, environmental permitting/environmental compliance, and structural design. Furthermore, his duties include development and implementation of the design QA/QC programs for D-B projects and coordination with clients to ensure goals are met and quality is achieved. Mr. Giometti is responsible for staffing projects; hiring sub-consultants; negotiating contracts with clients, contractors, and sub-consultants; and project scheduling to ensure on-time/on-budget performance. Virginia Department of Transportation (VDOT), 2001-2014, Culpeper District Location and Design Engineer. Mr. Giometti was responsible for survey, hydraulic design, roadway design, and project management teams for highway design projects. He was responsible for providing guidance to staff, consultants, and developers in the application of VDOT and AASHTO design standards including approval of appropriate design waivers and recommendations for design exceptions. He was also responsible for developing schedules and budgets for VDOT's annual Six Year Plan updates, establishing resource needs, value engineering, developing context sensitive solutions, interfacing with citizens, community groups, leaders, elected officials, and various public agencies. Mr. Giometti carried out his duties while maintaining up-to-date schedules and budgets, monitoring consultant performance, and ensuring QA/QC protocols were followed.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: Virginia Polytechnic Institute and State University, Blacksburg, VA / BS / 1988 / Civil Engineering	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1998 / Professional Engineer / #0402032300	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.) * On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.	
VDOT, Route 29 Solutions, Albemarle County, VA (DESIGN-BUILD)	
Name of Firm: Rinker Design Associates, P.C.	Project Role: Design Element Leader
Beginning Date: March 2015	End Date: October 2015 (design complete)
Specific Responsibilities: As Design Element Leader, Mr. Giometti was responsible for the design, management, and QA/QC for complete roadway construction plans, as well as coordinating and addressing RFIs and Shop Drawing Reviews for the widening of Route 29 to six lanes divided. His role also included coordination of roadway design technical issues, survey, right of way acquisition, and utility coordination across all three projects (the Rio GSI, 29 Widening, and Berkmar Drive). Mr. Giometti's project responsibilities included design oversight of roadway, hydraulics, and TMP. He was responsible for coordinating with the contractor (during design and during construction), VDOT, geotechnical engineers, and traffic/ITS engineers to ensure that the design requirements of the contract were met and to expedite the design and associated services. Mr. Giometti also coordinated routinely with the project's Public Relations Manager, Mr. Chris Reed, to ensure timely and accurate information was disseminated to the public. During construction, Mr. Giometti is providing field engineering decisions to assist the contractor in addressing differing conditions as well how to correct non-conforming construction elements. In several cases, the field coordination resulted in plan revisions to better align with the field conditions and best means and methods of construction. Worked with Ken Prince, Mo Kim, Brian Komar, Chris Reed, Mike Short, Jon Bonghi, Bill Missell, Chris Calamos.	
Project Relevance: Similar to the I-95 Express Lanes – Southern Terminus project, this \$117M D-B project consisted of the development of roadway widening along a congested corridor. Early integration of utility relocation and betterment plans with the roadway design that drove the MOT and construction sequencing due to the limited space within the corridor. Further complicating the TMP were the grade changes necessary to correct the existing substandard vertical geometry requiring an emphasis on carefully selecting safe construction access points. The southern extension of the I-95 Express Lanes will provide similar challenges in	

developing an effective vertical geometry that provides safe construction access while accommodating the existing general purpose lanes and structures.		
Garrisonville Road (Route 610) Safety Improvements PPTA, Stafford County, VA (DESIGN-BUILD)		
Name of Firm: Rinker Design Associates, P.C.	Project Role: Design Manager	
Beginning Date: September 2013	End Date: February 2016 (est., design is complete)	
Specific Responsibilities: Design Manager for widening of busy commercial corridor to 6-lanes divided. Project included curb and gutter, sidewalks, and new traffic signals. Extensive effort and creativity was necessary to minimize and mitigate impacts to commercial property parking throughout the corridor. Mr. Giometti was responsible for the design management and design QA/QC for complete construction plans to include: roadway and drainage design; traffic engineering; TMP/MOT; E&S; environmental permitting; and geotechnical analysis coordination. Responsibilities also included utility coordination, public involvement, and oversight/management of sub-consultants. Mr. Giometti worked with directly with the construction staff to develop the TMP to address specific sequencing needs and construction means and methods. <i>Worked with Mo Kim, Brian Komar, Chris Reed, Mike Short, Jon Bonghi, Adam Welschenbach, Chris Calamos, Janet O'Neill</i>		
Project Relevance: This \$13M D-B project consisted of the development of roadway design of a highly congested urban roadway. The TMP design along this congested roadway presented unique challenges to ensure driver and construction personnel safety – identical challenges that we will encounter on the I-95 Express Lanes – Southern Terminus project. Management and coordination with sub-consultants to including geotechnical engineering were critical to ensure timely delivery of the final design.		
Truslow Road (Route 652) Safety Improvements PPTA, Stafford County, VA (DESIGN-BUILD)		
Name of Firm: Rinker Design Associates, P.C.	Project Role: Design Manager	
Beginning Date: September 2013	End Date: March 2015 (design complete)	
Specific Responsibilities: Design Manager for road reconstruction project to improve sight distance and roadway geometry. Design included curb and gutter, shared use path, and improvements to horizontal and vertical alignments. Mr. Giometti was responsible for the design management and design QA/QC for complete construction plans to include: roadway and drainage design; traffic engineering; TMP/MOT; E&S; environmental permitting; and geotechnical analysis coordination. Responsibilities also included utility coordination, public involvement, and oversight/management of sub-consultants. Mr. Giometti worked with directly with the construction staff to develop the TMP to address specific sequencing needs and construction means and methods. <i>Worked with Mo Kim, Brian Komar, Chris Reed, Mike Short, Jon Bonghi, Adam Welschenbach, Chris Calamos, Janet O'Neill</i>		
Project Relevance: This \$6.5M D-B project consisted of the development of roadway design for the geometric upgrade and safety improvements for a high crash rate roadway. Management and coordination with sub-consultants to include geotechnical engineering were critical to ensure timely delivery of the final design.		
VDOT, Interstate 64 Zion Crossroads Interchange, Louisa County, VA (DESIGN-BUILD)		
Name of Firm: VDOT	Project Role: Design Manager	
Beginning Date: March 2011	End Date: January 2013 (left employment before completion)	
Specific Responsibilities: As Design Manager, Mr. Giometti was responsible for the original planning and oversight for Virginia's first Diverging Diamond Interchange. Responsible for the oversight of the interchange modification report and coordination with FHWA, coordinating the geotechnical data report, developing design criteria, evaluation of technical proposals and design review. Oversight included the ramp widening, stormwater management facilities, storm drainage, erosion and sediment control, signing, pavement marking, extensive maintenance of traffic and traffic signal design.		
Project Relevance: This \$8.8M D-B project consisted of the development of modifications to an existing interstate interchange to include complex TMP to ensure safety of interstate commuter traffic.		
Route 29 Charlottesville Bypass, Albemarle County, VA (DESIGN-BUILD)		
Name of Firm: VDOT	Project Role: Design Manager	
Beginning Date: July 2011	End Date: January 2013 (left employment before completion)	
Specific Responsibilities: As Design Manager, Mr. Giometti was responsible for technical oversight, and plan review as well as leading a series of community task force meetings to address citizens' concerns. The project included several location hearings, environmental analysis including section 106 coordination and 4(f) impacts, and extensive public involvement.		
Project Relevance: This \$245M D-B project consisted of the development of a six-mile, four-lane primary arterial bypass on new alignment including two interchanges and 17 bridges. The Charlottesville Bypass was a high-profile project with the attention and scrutiny of elected officials and the traveling public, similar to what is expected with the I-95 Express Lanes – Southern Terminus project.		
* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.		
h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.		
N/A. Mr. Giometti is not required onsite full-time.		

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: BRIAN BASNIGHT / CONSTRUCTION MANAGER	
b. Project Assignment: CONSTRUCTION MANAGER	
c. Name of Firm with which you are now associated: THE LANE CONSTRUCTION CORPORATION	
<p>d. Employment History: With this Firm <u>4</u> Years With Other Firms <u>22</u> Years</p> <p>Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below):</p> <p>The Lane Construction Corporation, 2012–Present. Mr. Basnight, serves as a Construction Manager for LANE. He is responsible for managing the entire construction process. His experience includes: managing the D-B construction process; cost control tracking; field layouts; survey; and safety implementation. He is accountable for all project QC activities, CPM scheduling, submittals, RFIs; progress reports, and subcontractor coordination. He has control over constructability reviews with the designer and VDOT to ensure all work meets approved construction plans and specifications. Mr. Basnight leads and implements safety initiatives, establishes project objectives, policies, procedures and performance standards, sets and monitors budgets, and assures that a quality management system is in place.</p> <p>Archer Western Contractors, 2007 – 2012. As Construction Manager, Mr. Basnight’s responsibilities included overseeing daily construction and ensuring all materials used and work performed were in compliance with contract and specifications. He was additionally responsible for project cost, staffing, quality control, and scheduling. He has served as Construction Manager on projects in Georgia and Virginia. Mr. Basnight has extensive experience with bridge and other concrete structures, roadway, retaining walls, utility relocations, drainage, MOT, environmental controls, asphalt and concrete paving, and other heavy civil construction elements.</p> <p>E.V. Williams, Field Manager/Engineer, 2001 – 2007. As a Construction Manager/Engineer, Mr. Basnight’s responsibilities included overseeing daily construction activities and ensuring all materials used and work performed was in compliance with specifications. Also responsible for project cost, staffing, quality control, and scheduling. Mr. Basnight served as Construction Manager and Field Engineer on projects throughout the Hampton Roads area.</p>	
<p>e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization:</p> <p>University of North Carolina, Chapel Hill, NC / M.S. / 1992 / Civil Engineering</p> <p>University of North Carolina, Chapel Hill, NC / B.S. / 1990 / Civil Engineering</p>	
<p>f. Active Registration: Year First Registered/ Discipline/VA Registration #:</p> <p>VDOT Erosion & Sediment Control Contractor Certification, Cert # 6006C, Expires 11/18/2016</p> <p>Virginia Department of Environmental Quality Responsible Land Disturber, Cert # 41032, Expires 12/20/2016</p>	
<p>g. Document the extent and depth of your experience and qualifications relevant to the Project.</p> <ol style="list-style-type: none"> 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> <p>(List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)</p> <p>* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.</p>	
VDOT, I-95 Express Lanes, Fairfax County to Stafford County, Virginia (DESIGN-BUILD)	
Name of Firm: The Lane Construction Corporation	Project Role: Construction Manager (Area 1/Bridge)
Beginning Date: October 2012	End Date: January 2014
<p>Specific Responsibilities: Mr. Basnight’s role as Construction Manager for the I-95 Express Lanes – Southern Terminus project is similar to the role he held on the I-95 Express Lanes D-B project. Mr. Basnight was responsible for the management of the construction process which included the QC program, project schedules, cost control, subcontractor coordination, work plans, and specific means/methods for carrying out the work. He was responsible for ensuring the materials used and work performed met contract requirements and the “approved for construction” plans and specifications. Mr. Basnight had extensive involvement with the complex MOT plans and implementation, relocation, adjustments, and coordination of utilities, and helped address environmental concerns (this project has been lauded for its landscaping and environmental measures). He also oversaw coordination with VRE and Norfolk Southern railroads. Mr. Basnight was full time/on-site throughout the construction phase.</p> <p>Project Relevance: This \$726M DB project created 29 miles of Express Lanes on I-95 from Alexandria to Stafford. A 9-mile, reversible two-lane extension of the existing HOV lanes helps alleviate some of the worst traffic on one of the most heavily travelled and congested urban corridors in the United States. The greatest similarity to the proposed project was the median work zone in a high traffic Virginia Interstate where Mr. Basnight helped to successfully deliver this important fast track project under budget, under schedule and no recordable safety incidents with over 4,000,000 manhours worked. Other</p>	

similar scope of work items to the I-95 Southern Extension project include: interstate widening, poor soils mitigations, significant environmental efforts; geotechnical explorations; storm drain.; traffic control devices; ITS devices/systems; TMP; noise walls; survey, R O W ; utilities; QA/QC; construction engineering and inspection; and project management. Like the I-95 Express Lanes – Southern Terminus Extension project, the I-95 Express Lanes included extensive MOT plans, utility relocation efforts (including past identification and data gathering), review of design concepts against existing utilities, determination of mitigation measures, and ongoing coordination with utility companies. The project involved comprehensive public relations with over 365 outreach meetings held during the course of the project. The project received ARTBA’s Safest Project of the Year, ENR’s Project of the Year in the Mid-Atlantic, and P3 Highway Project of the Year finalist. ***Worked with proposed DBPM Ken Prince, Mike Leitch, Chris Monahan, and Shane Smith.***

VDOT, I-64/I-264 Pavement Rehabilitation, Norfolk, Virginia (DESIGN-BUILD)

Name of Firm: The Lane Construction Corporation	Project Role: Construction Manager
Beginning Date: January 2014	End Date: November 2015

Specific Responsibilities: Mr. Basnight was responsible for planning, directing, and coordinating all construction activities, including quality control, project budget control and management of all subcontractors. He directed and managed project development and coordinated with the Lead Designer for all engineering and construction matters including constructability reviews. He reviewed project status reports and ensured all designs adhered to contract specifications. He enforced the safety plan, daily and job specific goals, deliverables and estimated resources (manpower, materials and subcontractors) needed to achieve project goals. As CM, he was in charge of the overall project and weekly scheduling, means and methods of construction, public outreach and coordination with VDOT, the City of Norfolk, and adjacent projects. Mr. Basnight’s role was identical to the requirements for the CM for the I-95 Express Lanes – Southern Terminus project.

Project Relevance: This \$32M D-B project located in an urban/commercial area consists of the rehabilitation on approximately 10.2 miles of Interstates 64 and 264 in Norfolk. This project has many similar scope elements as the I-95 Express Lanes – Southern Extension project: heavy MOT in high traffic volumes, pavement repairs, traffic control devices; ITS devices/systems; TMP, survey; structures; environmental; hydraulics; QA/QC; construction engineering and inspection; and project management. The project also includes significant public relations including coordination and development of work-plans that incorporates Third Party availability and schedule requirements. ***Worked with proposed DBPM Ken Prince.***

I-95 Bridge Restoration, Richmond, Virginia (DESIGN-BUILD)

Name of Firm: Archer Western Contractors	Project Role: Construction Manager
Beginning Date: June 2010	End Date: June 2012

Specific Responsibilities: As CM, Mr. Basnight was responsible for the management of the construction process which included the QC program, project schedules, cost control, subcontractors, work plans, and specific means/methods for carrying out the work. He was responsible for ensuring the materials used and work performed met contract requirements and the “approved for construction” plans and specifications. He also supervised all billing, pay requests, change orders, contracts, pay estimates, submittals, schedule updates, cost report quantities, revenue, and forecasting costs.

Project Relevance: This \$85M project used the Accelerated Bridge Construction (ABC) technology to reduce impacts on I-95 travelers by moving the assembly of 234 pre-cast bridge units offsite. When the units were ready to be installed, the 50-120 ton concrete sections were transported to the project site by truck. Existing bridge decks and beams were removed and the pre-cast units were set in place and secured. The work usually took place overnight so traffic patterns were returned to normal by morning. Similarities in scope of work to the I-95 Southern Extension project include: survey; structures; environmental; geotechnical explorations; hydraulics; traffic control devices; TMP; utilities; public involvement/relations and management; QA/QC; coordination and development of workplan and with third parties; CEI; and project management.

VDOT BATTLEFIELD BOULEVARD, Chesapeake, Virginia (DESIGN-BUILD)

Name of Firm: EV Williams	Project Role: Construction Manager
Beginning Date: June 2003	End Date: June 2007

Specific Responsibilities: Mr. Basnight was the Construction Manager/Field Engineer for this \$220M project and supervised all field construction activities as well as survey operations. He was responsible for ensuring the materials used and work performed met contract requirements and the “approved for construction” plans and specifications. Mr. Basnight led and supported all superintendents and foremen regarding the proper project layout and understanding of construction drawings to ensure that all craft workers understood and adhered to planned cost and production levels. He was also responsible for developing the 3-week rolling schedule, updating the P3 schedule, and coordination of field engineers. Mr. Basnight was full-time on-site during construction.

Project Relevance: This urban/commercial roadway and interchange project was completed under budget and ahead of schedule. This project incorporated an innovative design processes for the Hampton Roads region. Similar to the I-95 Express Lanes – Southern Terminus Extension project, Battlefield Boulevard project was completed in heavy traffic with extensive MOT efforts. Other relevant project elements were paving operations, utility relocations, temporary detours, traffic signals/ITS systems, environmental permitting and compliance, storm drainage, stormwater management ponds, railroad coordination, TMP, challenging geotechnical conditions, public involvement/public outreach, QA/QC, and third party/stakeholder coordination.

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

Current Assignment: Available. **Role:** N/A. **Duration of Assignment:** Available upon Notice of Intent.

ATTACHMENT 3.3.1

KEY PERSONNEL RESUME FORM

Brief Resume of Key Personnel anticipated for the Project.	
a. Name & Title: WILLIAM MONROE, TSOS / SENIOR ITS RESOURCE MANAGER	
b. Project Assignment: ITS/ELECTRICAL MANAGER	
c. Name of Firm with which you are now associated: SABRA, WANG & ASSOCIATES, INC.	
d. Employment History: With this Firm <u>9</u> Years With Other Firms <u>35</u> Years Please list chronologically (most recent first) your employment history, position, general responsibilities, and duration of employment for the last fifteen (15) years. (NOTE: If you have less than 15 years of employment history, please list the history for those years you have worked. Project specific experience shall be included in Section (g) below): Sabra, Wang and Associates, Inc., 2007-Present, Senior ITS Resource and Project Manager. Mr. Monroe is responsible for managing projects that include a full spectrum of ITS devices including DMS, CCTV, and ATRs, installation, traffic signal design, construction inspection, maintenance and integration of intersections, central computer systems, "on street master" systems, traffic signal coordination, vehicle detection, and inspection and testing. responsible for fiber, power, wiring, splicing, ITS and other associated device installation, inspection and testing MasTec, Inc., 2003-2007, Project Manager. Mr. Monroe was responsible for managing the installation of traffic signals, lighting, ITS, and communications infrastructure for a variety of projects. His duties included project inspection and quality control, change order pricing, inspection and testing, and management of multiple crew supervisors. He was also responsible for the replacement of traffic signal control cabinets, fiber cable, and communication hub cabinets as well as their integration onto a new traffic management centers. Mr. Monroe produced a computer program to translate the existing traffic signal timing and coordination data from the existing pre-NEMA signal equipment to the new NEMA format. He also provided workaround solutions and external logic circuits to accommodate unique signal indications and sequences. Davis H. Elliot Company, Inc. 2001-2003, Traffic Signal Division Project Manager. Mr. Monroe was responsible for traffic signal and ITS operations averaging \$500,000 per year within a three-state area. He also provided support to the Power Line Construction and Electrical Divisions as necessary.	
e. Education: Name & Location of Institution(s)/Degree(s)/Year/Specialization: US Navy, Great Lakes, IL / Electronics & Electrical Training / 1977 / Solid State & Electrohydraulic Equipment	
f. Active Registration: Year First Registered/ Discipline/VA Registration #: 1995 / Master Electrician / #2710-020167 2010 / Traffic Signal Operational Specialist (TSOS) / #125 IMSAs Certifications: 2007 / Traffic Signal Level III (IMSAs Certification); 2007 / Traffic Signal Inspector; 2007 / IMSAs Instructor; 1982 / Work Zone Protection <i>Mr. Monroe will successfully complete OSHA training in electrical safety for Arc Flash Protection and Lockout/Tagout prior to the commencement of construction.</i>	
g. Document the extent and depth of your experience and qualifications relevant to the Project. 1. <i>Note your role, responsibility, and specific job duties for each project, not those of the firm.</i> 2. <i>Note whether experience is with current firm or with other firm.</i> 3. <i>Provide beginning and end dates for each project; projects older than fifteen (15) years will not be considered for evaluation.</i> (List at least three (3), but no more than five (5) relevant projects* for which you have performed a similar function.)	
VDOT, I-395 HOV Ramp at Seminary Road, Fairfax County, VA (DESIGN-BUILD)	
Name of Firm: Sabra, Wang & Associates, Inc.	Project Role: Senior ITS Resource Manager
Beginning Date: January 2013	End Date: Spring 2016 est.
Specific Responsibilities: As Senior ITS Resource Manager, Mr. Monroe is responsible for the development of ITS plans and constructability reviews for the gate control system (GCS) at I-395 and Seminary Road and the traffic signal at the I-395 HOV ramp at Seminary Road. The ITS design includes the integration of the GCS with the adjacent NRO I-395 GCS Upgrade and 95 Express Lanes projects as well as the relocation of the fiber and electrical duct banks along I-395 and the existing ITS equipment that will be impacted by I-395 widening. Mr. Monroe regularly coordinates with the DBPM regarding the sequence of construction and the critical necessity of keeping the existing ITS equipment operational during construction. His prompt response to requested design changes has proven invaluable to the success of this project.	
VDOT, Statewide ITS Contract	
Name of Firm: Sabra, Wang & Associates, Inc.	Project Role: Senior ITS Resource Manager
Beginning Date: 2013	End Date: 2014

Specific Responsibilities: As Senior ITS Resource Manager, Mr. Monroe was responsible for the development of ITS Standard detail drawings for standard ITS devices and installations for use throughout Virginia as well as updating the ITS Specifications.

VDOT, Mid-Town Tunnel/Martin Luther King Boulevard, Portsmouth, VA (DESIGN-BUILD)

Name of Firm: Sabra, Wang & Associates, Inc.	Project Role: Electrical Resource
Beginning Date: 2012	End Date: 2014

Specific Responsibilities: As Electrical Resource, Mr. Monroe is responsible for assisting with lighting and ITS power design, load centers, and related infrastructure using VDOT's lighting design manual, NEC, NESC, and voltage drop calculator. He also conducted constructability reviews of the design work of other team members. Mr. Monroe was instrumental in selecting the most economical electrical services considering all ITS equipment and their respective locations along the project, communicating directly with the electrical utility engineer, and discussing the possible use of existing electrical distribution systems in close coordination with the ITS design engineer and equipment installers.

InterCounty Connector (ICC) Contract A: Lighting, ITS, & Traffic Signal Catalog Cut Reviews, Montgomery County, MD (DESIGN-BUILD)

Name of Firm: Sabra, Wang & Associates, Inc.	Project Role: ITS Project Manager
Beginning Date: 2009	End Date: 2010

Specific Responsibilities: As ITS Project Manager, Mr. Monroe assisted with traffic signal and ITS equipment catalog cut reviews, red line revision estimates, supplemental cost estimates, and material verification. His duties included extensive reviews of all electrical material, roadway and under-bridge lighting, ITS equipment, traffic signals, video detection, and controller cabinets on the project. He also assisted with the design of a standard toll rate sign package purchased from Daktronics by working alongside multiple consultants, engineers, and contractors in order to have the specifications and plans completed and the equipment manufactured and installed before the opening of the roadway. He also served as ITS Project Manager for ICC Contracts B and C.

MdTA, I-95 Section 100 Express Toll Lanes (ETL), Baltimore County, MD (DESIGN-BUILD)

Name of Firm: Sabra, Wang & Associates, Inc.	Project Role: ITS Project Manager
Beginning Date: 2007	End Date: 2011

Specific Responsibilities: As ITS Project Manager, Mr. Monroe was responsible for the development of plans, specifications, and cost estimates for DMS, ATR, CCTV, RWIS, and toll gantry sites for the I-95/MD 43 and I-95/I-895 (north) interchange reconstruction projects. Work included reviewing the contractor's proposed equipment specification and submittals, coordinating field changes, and providing work around solutions for utility conflicts. Mr. Monroe was also responsible for the design of ITS devices along I-95 from Moravia Road to New Forge and on I-895 from Pulaski Highway to I-95. His duties included designing power and communications to 10 Dynamic Message Signs (DMS) and 7 toll rate signs. In addition, Mr. Monroe served as the ITS Resource for electrical, communication, and site design for over 20 ITS devices as part of the ETL project at 3 interchanges. ITS design included Dynamic Message Signs (DMS), Road Weather Information Systems (RWIS), Automatic Traffic Recorders (ATR), and Toll Gantries.

* On-call contracts with multiple task orders (on multiple projects) may not be listed as a single project.

h. For Key Personnel required to be on-site full-time for the duration of construction, provide a current list of assignments, role, and the anticipated duration of each assignment.

N/A. Mr. Monroe is not required onsite full-time.

ATTACHMENT 3.4.1(a)
LEAD CONTRACTOR WORK HISTORY FORMS

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: I-95 EXPRESS LANES Location: Fairfax, Prince William and Stafford Counties, VA DESIGN-BUILD	Name: HDR/HNTB	Name of Client./ Owner: VDOT Phone: 571.483.2651 Project Manager: Charlie Warraich, PE Phone: 571.273.8229 Email: H.S.Warraich@VDOT.Virginia.gov	12/30/2014	12/14/2014	\$691,147	\$726,194	\$326,850

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly.

Similar Scope of Work:

- Design-Build
- Teamed with RDA
- Roadways
- Survey
- Environmental
- Geotechnical
- Hydraulics
- Traffic Control Devices
- Utilities
- Soundwalls
- Signs, Sign Structures, and Foundations
- Lighting
- QA/QC
- Intelligent Transportation Systems (ITS)
- Construction Engineering and Inspection
- Overall Project Management
- Stormdrain and SWM
- Guardrail
- Transportation Management Plan
- Right-of-Way
- Stakeholder Coordination/Public Involvement

Proposed Personnel on Project:

Ken Prince (LANE)
Mike Leitch (LANE)
Mo Kim (RDA)
Bill Missell (RDA)
Adam Welschenbach (RDA)

Brian Basnight (LANE)
Chris Monahan (LANE)
Shane Smith (LANE)
Song Kim (RDA)

PROJECT SCOPE

LANE, as a Construction Joint Venture (CJV) member, shared responsibility for the design and construction of the \$726M I-95 Express Lanes project. The project created approximately 29 miles of Express Lanes in the median of I-95 from Alexandria to Stafford. The scope of work included a 9-mile roadway extension that consisted of maintenance of traffic, poor soils mitigations, shoulder reconstruction, asphalt mill and overlay, structural bridge work, major clearing and earthwork, drainage, an extensive ITS and signing system, and sound walls. LANE provided nearly all of the project supervision and workforce for the work; plus, all of the asphalt paving, soundwall construction and a significant portion of the roadway signage.

RELEVANT PROJECT ELEMENTS TO I-95 EXPRESS LANES – SOUTHERN TERMINUS EXTENSION

LANE/RDA Team: LANE and RDA partnered together to provide complete design services for the I-95 Express Lanes project. Our team’s collaborative effort in developing a comprehensive TMP for the corridor, design adjustments to avoid utilities, and expedited utility relocations where avoidance was not feasible ensured that the project stayed on schedule.

ITS: Identical to the I-95 Southern Extension project, the I-95 Express Lanes project involved sign design and construction support of ITS CCTV traffic surveillance cameras; DMS signs; microwave traffic detectors; video-based automatic incident detection cameras; emergency gate telemetry; express lane access gates; EZ-pass toll equipment; fiber optic communications; power distribution; and emergency back-up power system. LANE was also responsible for the ITS integration.

Geotechnical: Our Team performed geotechnical investigation and analysis for more than 400 borings; performed pavement design and optimized foundation design in areas containing Potomac clay and acidic sulfate soils (which will most likely be present on the I-95 Southern Extension project).

Safety: The project recorded nearly 4,000,000 man hours worked with 0 Lost Time Accidents. The project OSHA Recordable Incident Rate was 0.44, well below the industry average of 3.6.

Roadway: Similar to the I-95 Southern Extension project, LANE performed pavement widenings as well as new pavement in the median of an existing high ADT count Virginia interstate. Additionally, LANE performed shoulder strengthening operations on existing shoulders adjacent to this traffic. Extensive asphalt mill and overlays were also executed. As lane closures were needed for various reasons including overhead steel erection, LANE and RDA devised many innovative ways to keep traffic flowing on existing roadways as well as temporary pavements, some of which were on poor soils that required amendments. This new construction in the median of the roadway provides new access points to serve Virginia-based destinations, including Tysons Corner, City of Alexandria, Arlington County, and major military sites.

Structures/Bridges: Nine (9) new bridges were constructed along the project corridor. The new bridges included: two curved steel girders, two double span flyovers, three single span bridges with steel girders, one two-span concrete girder bridge and a two-span steel girder bridge. LANE also widened and/or rehabilitated 29 bridges. All of these involved keeping existing traffic moving while performing the work.

MOT: The I-95 Express Lanes project presented numerous work zone ingress/egress challenges and very tight work areas due to the heavy traffic and median work zone conditions. The I-95 project corridor carries an ADT of nearly 250,000 vehicles per day. The LANE Team mitigated this challenge by working with construction and engineering personnel to devise the best MOT schemes and develop efficiencies; over 1,000 MOT plan sheets were developed and approved. The need for an innovative work zone traffic control and access plan was particularly critical on this project due to the severe deterioration of some of the mainline and surrounding road pavements. Unimpeded access to the existing median was necessary to improve safety, minimize impacts to traffic, reduce stress on existing infrastructure, and accelerate the project schedule.

Public Involvement: A dynamic public information program was implemented which provided advance information notifications to VDOT and the public. This has been facilitated through meetings, website access, email blasts, flyers, and door to door calls promoting awareness of construction operations and lane closures in order to provide better travel planning through the corridor. The team held over 415 public meetings and the project site had visits from former Governor McDonnell and VDOT Secretary of Transportation Aubrey Layne as well as accolades from current Governor Terry McAuliffe.

Expedited Project Delivery: The Team had 1,009 days to design and construct this fast track D-B project. The team received NTP on March 27, 2012 and it was imperative that construction start in the first season in order to finish by December 31, 2014. Our Team was able to deliver 123 design packages by implementing over-the-shoulder reviews to help get early approval and were able to begin construction within 4 months of NTP. We were

able to complete the project early. In all, the Team completed **29 miles in 29 months!**

Environmental: Beginning in January 2013, the D-B team led the efforts to restore Swan's Creek—a tributary to the Potomac River and Chesapeake Bay which had been severely eroded and degraded—by installing erosion and sediment controls, placing stone along the creek bed, and micro-grading to allow for habitats and improvements to the overall water quality. With the completed restoration, the stream now feeds higher quality water into the region's waterways. In addition, nearly 7,500 new trees and shrubs were planted as part of the restoration effort.

EVIDENCE OF PERFORMANCE

“The progress on the 95 Express Lanes project is a visible reminder of the congestion relief and new travel choices that Virginians will have available to them in less than a year.” - Governor Terry McAuliffe.

"The 95 Express Lanes combined with the nearly completed 495 Express Lanes will bring a transportation network that manages congestion efficiently, saving time and better connecting commuters with some of Virginia's most important employment centers and military sites." - Sean T. Connaughton, [former] Virginia Secretary of Transportation.

*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.



ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: I-495 EXPRESS LANES Location: Fairfax County, VA DESIGN-BUILD	Name: HNTB/HDR	Name of Client./ Owner: VDOT Phone: 540.829.7500 Project Manager: John Lynch, P.E. Phone: 540.829.7512 Email: John.Lynch@vdot.virginia.gov	12/2012	11/2012	\$1,346,560	\$1,481,670	\$642,000

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly.

<div>Similar Scope of Work:</div> <div><ul style="list-style-type: none">• Design-Build• Teamed with RDA• Roadways• Survey• Environmental• Geotechnical• Hydraulics• Traffic Control Devices• Utilities• Soundwalls• Signs, Sign Structures, and Foundations• Lighting• QA/QC• Intelligent Transportation Systems (ITS)• Construction Engineering and Inspection• Overall Project Management• Stormdrain and SWM• Guardrail• Transportation Management Plan• Right-of-Way• Stakeholder Coordination/Public Involvement</div>	<div>PROJECT SCOPE</div> <p>Construction of four new managed/HOV traffic lanes (two in each direction) in the median of the existing lanes on the Capital Beltway. Work included the reconstruction of ramps, heavy maintenance of traffic effort, shoulder reconstructions, interchanges, frontage roads, bridge over and underpasses and bridge widening’s, and pedestrian crossings. The Project encompassed the replacement of more than \$260M of aging infrastructure, including 12 interchanges and 58 bridges. Construction of the Project required close coordination with VDOT, MWAA, WMATA, local jurisdictions, businesses, community associations, and the traveling public. LANE provided nearly all of the project supervision and workforce, plus all asphalt paving.</p> <div>RELEVANT PROJECT ELEMENTS TO I-95 EXPRESS LANES – SOUTHERN TERMINUS EXTENSION</div> <p>Roadway: The I-495 Express Lanes project is one of the largest roadway projects constructed in the Commonwealth. Similar to the I-95 Southern Extension project, the I-495 Express Lanes project widened the existing roadway and improved numerous interchanges. The Express Lanes project has similar scope elements including, roadway widening, box culvert extensions, ITS, ramp extensions, shoulder strengthening, work in high volume ADTs, sound barriers, complex MOT schemes and bridge widenings.. The team constructed three new access points and upgraded 12 key interchanges that increased capacity and mobility, improved driver safety and removed operational deficiencies, with minimal impact to the traveling public, residences, and businesses.</p> <p>ITS: LANE was responsible for construction of the infrastructure and gantries necessary to accommodate the ITS and electronic tolling equipment. LANE was also responsible for the construction integration of the toll design and features which was closely coordinated with Transurban.</p> <p>Maintenance of Traffic: A key challenge on the I-495 Express Lanes project was accommodating extreme volumes of commuter, residential, and commercial vehicular traffic. The contract required the project to maintain the existing traffic during construction; affecting every phase of the planning, design, and construction. By conducting extensive traffic studies and through close coordination with VDOT and the local jurisdictions, our Team produced a number of innovative designs, work zone access methods, carefully planned lane shifts, and construction phasing sequences that helped to minimize disruption during construction. Additionally, the alignment of many of the existing bridges over the Beltway could not be shifted so new replacement bridges were built on the same footprint as the old structures. One of the significant challenges for this project was not starting daytime lane closures until after 9:30 am and having all four lanes of traffic open again at 3:30 pm. Overnight closures were similarly restricted and exceptions were rare – primarily for steel erection, where short-duration total closures were permitted. LANE fulfilled this requirement by not reducing traffic capacity during construction.</p> <p>Complex Utility Relocation: There was a significant utility coordination effort, both in relocation of existing utilities and the installation of new services for lighting and toll facilities. Two high voltage transmission lines ran in a corridor parallel to the main alignment of the project, crossing several arterial roads that were associated with the project. At one arterial there was insufficient clearance between the transmission line sag and the road surface. The transmission line had to be raised by installing an insert in one supporting tower. More than 102,000 linear feet of utilities, owned by 15 utility owners were relocated including water, sanitary sewer, electric, and telecommunications. In total, over 175 utility conflicts were identified and resolved.</p> <p>Environmental: The project alignment traversed multiple wetlands, wooded areas, and state and county park lands, which required identification and protection of specimen trees on the project perimeter as well as wetland delineation, protection and conversion.</p> <p>Significant Economic Corridor: The Capital Beltway (I-495) was originally envisioned as primarily a bypass for long-distance eastern seaboard traffic to avoid driving directly through Washington, DC. However, the explosive growth both of housing and business in the Washington suburbs following the Beltway's completion quickly made the Beltway the area's "main street" for local traffic as well. Similar to I-95 Southern Extension project, numerous large shopping centers, community colleges, and corporate employment centers were purposely built adjacent to the Beltway, and these added greatly to the traffic. I-495 Express Lanes cross several streets and busy state routes, and included interchange reconstruction on the nation’s 4th ranked busiest highway, requiring intensive MOT planning and coordination to keep the congested traffic moving throughout construction.</p>	
<div>Proposed Personnel on Project:</div> <div>Brian Basnight (LANE) Chris Monahan (LANE) Chris Reed (RDA)</div>	<p>Public Outreach/Involvement: More than 2,000 public outreach meetings were conducted and, in coordination with VDOT, the Team kept the public involved through various media methods: project website, routine newsletters, and brochure mailings to residents and business.</p> <p>Safety: The I-495 Express Lanes project has been the recipient of numerous awards including a safety award for more than 5 million manhours without a lost time incident in September 2012. Despite working alongside traffic in a limited area, with many key activities like bridge demolition and steel erection occurring at night, the construction team achieved a Total Recordable Incident Rate (TRIR) of 0.69, which ranks the project among the best heavy civil projects in the nation.</p>	
<div>EVIDENCE OF PERFORMANCE</div> <p>“A solid experienced company that has built to standard and worked well under difficult traffic and space constraints to minimize impact on travel.” - <i>Garrett Moore, P.E., VDOT Chief Engineer</i></p> <p>“Project was built over four years under traffic as high as 200,000 vpd and achieved 5 million safe work hours as of September 2012 without a lost time incident, making it among the safest heavy civil projects ever built in the U.S.” - <i>Public Works Financing Newsletter, 12/2012</i></p> <p>“As the primary self-perform entity in the Flour-Lane Joint Venture, Lane has demonstrated outstanding ability to complete construction on time under these heavy traffic conditions,” wrote Tim Steinhilber (General Manager, Capital Beltway Express, LLC)</p> <p>*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.</p>		

ATTACHMENT 3.4.1(a)

LEAD CONTRACTOR - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime design consulting firm responsible for the overall project design.	c. Contact information of the Client or Owner and their Project Manager who can verify Firm’s responsibilities.	d. Contract Completion Date (Original)	e. Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Dollar Value of Work Performed by the Firm identified as the Lead Contractor for this procurement.(in thousands)
					Original Contract Value	Final or Estimated Contract Value	
Name: I-95 SHOULDER & AUXILIARY LANES IMPROVEMENTS Location: Prince William County, VA	Name: Rummel, Klepper & Kahl	Name of Client./ Owner: VDOT Phone: 571.483.2651 Project Manager: Charlie Warraich, PE Phone: 571.273.8229 Email: H.S.Warraich@VDOT.Virginia.gov	08/2015	08/2015	\$29,171	\$32,437 *Owner added scope	\$32,437

h. Narrative describing the Work Performed by the Firm identified as the Lead Contractor for this procurement. If the Offeror chooses to submit work completed by an affiliated or subsidiary company of the Lead Contractor, identify the full legal name of the affiliate or subsidiary and the role they will have on this Project, so the relevancy of that work can be considered accordingly.

Similar Scope of Work:

- Roadways
- Survey
- Environmental
- Geotechnical
- Guardrail
- Hydraulics
- Stormdrain and SWM
- Traffic Control Devices
- Utilities
- Signs, Sign Structures, and Foundations
- Lighting
- QA/QC
- Intelligent Transportation Systems (ITS)
- Safety
- Stakeholder Coordination/Public Involvement
- Overall Project Management

Proposed Personnel on Project:

Ken Prince (LANE)

Shane Smith (LANE)

PROJECT SCOPE

This \$32M roadway improvement project comprised of a full width left shoulder widening section and the construction of auxiliary lane sections in order to decrease the weave areas of the northbound and southbound lanes of interstate 95. LANE, as Lead Contractor, was responsible for the construction of 7.05 miles of full depth improvements as well as providing MOT, earthwork, drainage, lighting, ITS, 10 miles of guardrail, 2,000 feet of RW3 retaining wall, and mill and overlay on all of the general purpose lanes.

The inside and outside shoulders between Dumfries Road and the Prince William Parkway were widened, both north and southbound, to 12 feet with full-depth pavement to make the shoulders suitable for traffic use during accidents, evacuation, enforcement and detours. Auxiliary lanes were constructed at three locations to create safer access and merging, particularly at the truck scale area. To create the auxiliary lane, crews extended the acceleration and deceleration lanes between on- and off-ramps. On I-95 northbound, auxiliary lanes now connect the Opitz Boulevard on-ramp with the Prince William Parkway off-ramp, as well as the Route 234 on-ramp with the truck weigh station off-ramp. On I-95 southbound, an auxiliary lane now connects the truck rest area on-ramp with the off-ramp to Route 234.



RELEVANT PROJECT ELEMENTS TO I-95 EXPRESS LANES – SOUTHERN TERMINUS EXTENSION

Roadway: The project consisted of establishing and maintain E&S controls for 7 miles of interstate impacted area; over 100,000 cy of earthwork that included sawcut and demolition of existing pavement to the existing travel lane, box out cut and fill to establish subgrade to up to 17’ of median side widening; installation of storm water drainage; treatment of unsuitable soils utilizing several methods that included lime stabilization, cement treated aggregate, or undercut/replacement with select material; underdrain system; and installation of 22.5” new pavement section consisting of 21B, BM25.0A, IM19.0A/D, and SM12.0D/E. In line pavement markings as well as over 10 miles of new guardrail were also installed.

MOT: The I-95 Shoulder Improvements project was an integral part of the corridor designed to keep pace with increased roadway demand by easing several chokepoints, adding capacity during emergencies, and to reduce weaving and merging. Project phasing was an extraordinary consideration because of the need to maintain efficient traffic flow on this main artery during the construction to prevent delays to commuters and heavy through traffic. Emergency pull off areas were implemented to provide safe ingress and egress for the traveling public. Special care was taken to avoid loss of travel lanes for public use during the peak hours. Maintaining uninterrupted traffic flow and safety of the traveling public as well as the workers were two of the greatest priorities of the I-95 Shoulder Widening project. All construction work took place adjacent to or within areas of high-speed traffic, entering or exiting traffic, and/or decision making points for motorists approaching or leaving the HOV and entrance/exit ramps. An additional challenge was keeping heavy public traffic from frequent movement of construction vehicles along the interstate shoulder. LANE exercised extraordinary vigilance and precautions planning and communicating the plan with all parties and positioning positive traffic barrier service at strategic locations to safely protect the workers and traveling public. Continuous coordination meetings were conducted with the adjacent design-builder performing the signature I-95 Express Lanes project in order to avoid conflicting lane closures and further impacts to the traveling public and to ensure that all stakeholders understood the impacts of the work activities.

ITS: The ITS scope of work included the installation of new, modification of existing, and integration of the system into the exiting VDOT network. The work included over 5 miles of conduit, 50 miles of conductor cable, over four miles of 12/24/48 pair fiber optic cable, junction boxes, CCTV and DMS, and new ITS cabinet installation and communication equipment relocation. The fiber installation included (24) FOSC 450 enclosures with a total of (1080) fusion splices to integrate the newly installed fiber to the existing VDOT Network. The ITS cabinets included the installation of a 48 Port rack mounted fiber distribution switch in five locations. This unit was designed to support patching and splicing in one unit for diversifying the fiber network. Service panels required upgrading from 100 amp to a 200 amp panel in 6 locations including the retrofit of the panels by adding breaker bars and integrating the existing lighting into the new buildout. The DMS was integrated into the VDOT network by installing a 6 count fiber and a level 2 Moxa switch in the ITS cabinet. The work also included 11 overhead sign structures and numerous Type VI ground mounted signs to include 300 CY of foundation concrete. The signs included 4,303 SF of sign panels as well as Lumitrak lighting. Two hundred new roadway LP2 light poles with 400 watt HPS luminaires were installed and integrated into the existing lighting service panels along the 7 mile interstate alignment.

Partnering: One of the greatest contributing factors to the overall success of the project was the emphasis placed on cultivating and maintaining a strong partnership among all members of the project team that included LANE, VDOT, I-95 Express Lanes and other stakeholders. A sense of teamwork was fostered through the use of Partnering sessions. LANE’s proposed DBPM Ken Prince worked hand and hand with VDOT’s Megaproject Project Manager and the Responsible Charge Engineer. Experience and knowledgeable staff were assigned to lead and construct this project for their ability to recognize a potential problem and teamwork approach.



*For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

ATTACHMENT 3.4.1(b)
LEAD DESIGNER WORK HISTORY FORMS


ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-95 EXPRESS LANES Location: Fairfax and Prince William Counties, City of Alexandria, VA (DESIGN-BUILD)	Name: Fluor-Lane 95, LLC	Name of Client: VDOT, NOVA District Phone: 571-259-8229 Project Manager: Mr. Charlie Warraich, PE Phone: 571-259-8229 Email: charlie.warraich@vdot.virginia.org	MM/YYYY 08/2012	MM/YYYY 12/2014	\$691,147	\$726,194	\$2,749


h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. *For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

Similar Scope of Work:		PROJECT SCOPE	
<ul style="list-style-type: none">• Design-Build with LANE• Roadway• Geometric & capacity improvements• Complex TMP/MOT• Public Involvement/Communications• Third party coordination• Hydraulics• Storm Water Management• Survey		<p>As a subconsultant, RDA recently designed the Transportation Management/Traffic Control Plans for 21 miles of I-95/I-395 for construction of Express Lanes improvements from Route 234 in Prince William County to the project’s northern terminus near Edsall Road in Fairfax County, inside the Capital Beltway. The project entailed construction of roadway improvements to upgrade existing HOV lanes to a hybrid high occupancy/tolled facility with new lane construction at the southern end and numerous access points including flyover ramps added throughout the corridor. Significant project components included pavement reconstruction/resurfacing, construction of new bridges and structural widenings, barrier improvements, drainage system upgrades, ITS conduit duct banks, lighting, overhead signage, retaining walls and soundwalls. As part of completing the TMP/Traffic Control Plans, RDA participated in the coordination of design/construction issues with contractors and VDOT/GEC personnel, developing successful approaches to construction sequence operations that safely and efficiently moved high traffic volumes keeping project construction on schedule. The plans also included the preparation and analysis of detour plans, through the corridor and along the arterial roadways. These services were performed from RDA’s Manassas office and at the project site office.</p>	
Personnel on Project:			
Ken Prince (LANE) Brian Basnight (LANE)			
Mike Leitch (LANE) Chris Monahan (LANE)			
Mo Kim (RDA) Shane Smith (LANE)			
Bill Missell (RDA) Song Kim (RDA)			
Adam Welschenbach (RDA)			
<p>RDA worked with the utility companies and traced back through old plans to confirm the lines were abandoned.</p> <p>RDA also worked with designers and multiple electric companies to coordinate the new electrical services required for the corridor. Over 30 new or upgrades service locations/drops were required to provide power for the Intelligent Transportation System (ITS) and roadway lighting. Per the contract, all of the new services had to be 480-volt 3-phase power. Extensive coordination with the power company was required to determine the most cost effective route to bring this service to the proper location.</p>			
RELEVANT PROJECT ELEMENTS TO I-95 EXPRESS LANES – SOUTHERN TERMINUS EXTENSION PROJECT			
<p>LANE/RDA Team: LANE and RDA partnered together to provide complete design services for the 95 Express Lanes project. Our team’s collaborative effort in developing a comprehensive TMP for the corridor, design adjustments to avoid utilities, and expedited utility relocations where avoidance was not feasible ensured that the project stayed on schedule.</p> <p>Utilities: Although somewhat an unknown, we anticipate that there are several utility crossings along the I-95 Southern Extension project. As a result, our approach and experience on the 95 Express Lanes will be a benefit to the Team and VDOT.</p> <p>Roadway: Identical to I-95 Southern Extension project, the I-95 Express Lanes design added capacity by providing managed lanes and transition ramps to the existing north and southbound directions of I-95.</p> <p>Maintenance of Traffic: The 95 Express Lanes MOT was developed starting in the macro and migrating into the micro to ensure that no issue was overlooked and no consideration dismissed. Many of the same challenges, considerations, and complexities will be addressed during the development of the I-95 Express Lanes – Southern Terminus Extension Project’s TMP/MOT plan.</p> <p>Right of Way: RDA, in a similar role as is expected for the I-95 Southern Extension project, provided ROW acquisition services.</p>			
EVIDENCE OF OUTSTANDING PERFORMANCE			
<ul style="list-style-type: none">• Design completed as scheduled – utility coordination completed ahead of schedule to remove utilities from the critical path• Less than 1 MOT review comment per plan sheet for more than 21 miles of MOT design to include mainline, connectors and two significant detours for overnight work• No construction delays due to utility coordination/relocation			

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: Route 29 Solutions (Design-Build) Location: Albemarle County, VA	Name: Lane-Corman Joint Venture	Name of Client.: VDOT Phone: 540.825.7500 Project Manager: David Covington Phone: 434.529.6310 Email: Dave.Covington.vdot.virginia.gov	MM/YYYY 03/2015	MM/YYYY 10/2017 est.	\$116,746	\$116,746	\$3,059
h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. *For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.							
Similar Scope of Work: <ul style="list-style-type: none">• Design-Build with LANE• Roadway• Geometric & capacity improvements• Complex TMP/MOT• Public Involvement/Communications• Third party coordination• Hydraulics• Storm Water Management• Survey• Utility relocations• ROW acquisition		PROJECT SCOPE <p>The Route 29 Solutions Design-Build project consists of three elements: the Rio Road Grade Separated Intersection (GSI), the Route 29 Widening, and the Berkmar Extension. RDA provided engineering design services as the Lead Designer for the Route 29 Widening element. RDA also provided survey, utility relocation coordination, ROW acquisition, and public involvement services for all three elements. The project scope for the Route 29 Widening element expands the existing road from four to six lanes from Polo Grounds Road to Towncenter Drive for a length of approximately 1.8 miles.</p> <p>RDA performed the design services on this project as a sub-consultant to RK&K out of their Fredericksburg Office. Survey, utility coordination, right of way, and public involvement was performed out of both the Manassas and Fredericksburg Offices. All design services have been completed for the Route 29 Solutions except for the Berkmar ROW acquisition and the public involvement which will be ongoing until contract completion.</p> RELEVANT PROJECT ELEMENTS TO I-95 EXPRESS LANES – SOUTHERN TERMINUS EXTENSION PROJECT <p>LANE/RDA Team: LANE, RDA, and RKK partnered together to provide complete design services for the Route 29 Solutions project. Through collaboration and close coordination, our team is delivering a regionally significant project that involves a highly congested corridor with a project that safely widens Route 29 and provides an innovative, grade separated intersection (GSI) at Rio Road to effectively and efficiently move traffic.</p> <p>Roadway: Similar to I-95 Southern Extension Project, the Route 29 Widening design adds capacity, widening the existing roadway, and addressing undulating terrain. Geotechnical issues were overcome to utilize steep slopes, temporary and permanent retaining structures to enable a maintenance of traffic design that could be contained within the existing right of way. Additionally, the corridor is a vital commuter route, like I-95, requiring extensive public outreach to keep commuters informed of changing traffic conditions.</p> <p>Hydraulics: Most of the older culverts require replacement or rehabilitation. Video pipe inspections were evaluated to determine the appropriate course of action. The design also included hydrologic and hydraulic analysis for a major box culvert extension/rehabilitation at Powells Creek.</p> <p>Maintenance of Traffic: The Route 29 Widening roadway design and MOT were considered simultaneously to eliminate costly retaining walls and minimizing temporary pavement while largely staying within the existing right of way. Our complex TMP involved several phases that allowed existing vertical geometry to be brought to standard, maintained existing capacity, and resulted in significant cost savings for VDOT. The complexity of this MOT plan will be a critical experience that RDA will draw upon to perform similar services on I-95 Southern Extension Project.</p> <p>Utilities: Extensive utility relocation coordination is required for the Route 29 Solutions project, particularly for the Rio GSI and Route 29 Widening. Relocated utilities include electric, cable, gas, two water/sewer services, and six different communications lines. This coordination was on the critical path for construction activities to begin and was completed simultaneously for both projects in four months for Rio GSI and seven months for the Route 29 Widening.</p> <p>Right of Way: RDA is performing the ROW acquisition for all three elements simultaneously for a total of over 60 parcels. From the notice to commence acquisition to the proposed settlement of all parcels in aggregate, it will be seven months with each project element being completed within five months. The 29 Solutions project deals with contentious business owners and residents along all three project elements in acquiring rights-of-way for the project. Given the impacts on the I-95/Route 630 project, we anticipate similar concerns and issues.</p> <p>Public Involvement/Communications: RDA served as the Public Involvement lead on behalf the Lane-Corman JV. Major activities included representation at monthly Project Delivery Advisory Panel meetings, establishment and maintenance of a toll free project hotline, individual meetings with each business owner on the Rio GSI project to explain impacts, individual correspondence with the same business owners to notify of construction activities that will impact their property, and coordination with VDOT District Public Affairs Manager.[The I-95 Southern Extension Project will have similar challenges, especially with public perceptions, that our team has specific strategies in place to resolve concerns and progress the design efficiently and effectively.</p>					
Proposed Personnel on Project: <p>John Giometti, PE (RDA) Ken Prince (LANE) John Myers (RDA) Bill Missel, PE (RDA) Michael Short, PE (RDA) Brian Komar, PE (RDA) Chris Reed (RDA) Jon Bonghi, PE (RDA) Mo Kim, PE, DBIA (RDA) Chris Calamos (RDA) George Hansbrough (LANE)</p>							
EVIDENCE OF OUTSTANDING PERFORMANCE <ul style="list-style-type: none">• Delivered approved right of way plans within the first 4 months• Designed advance work package in 5 months from NTP to allow for construction to occur within existing right of way• Delivered approved for construction plans within 7 months from NTP.							

ATTACHMENT 3.4.1(b)

LEAD DESIGNER - WORK HISTORY FORM

(LIMIT 1 PAGE PER PROJECT)

a. Project Name & Location	b. Name of the prime/ general contractor responsible for overall construction of the project.	c. Contact information of the Client and their Project Manager who can verify Firm’s responsibilities.	d. Construction Contract Start Date	e. Construction Contract Completion Date (Actual or Estimated)	f. Contract Value (in thousands)		g. Design Fee for the Work Performed by the Firm identified as the Lead Designer for this procurement.(in thousands)
					Construction Contract Value (Original)	Construction Contract Value (Actual or Estimated)	
Name: I-66/Route 15 Interchange Reconstruction Location: Prince William County, VA DESIGN-BUILD	Name: The Lane Construction Corporation	Name of Client: VDOT, NOVA District Phone: 703.259.2960 Project Manager: Christiana Briganti-Dunn, P.E. Phone: 703.259.2960 Email: christiana.briganti@VDOT.Virginia.gov	MM/YYYY 12/2017	MM/YYYY 12/2017 est.	\$36,194	\$37,029	\$2,570

h. Narrative describing the Work Performed by the Firm identified as the Lead Designer for this procurement. Include the office location(s) where the design work was performed and whether the firm was the prime designer or a subconsultant. *For a project with multiple phases or multiple contracts, only one phase or one contract will be considered. If additional phases or contracts are shown under the same Work History Form, only the first phase or contract listed will be evaluated.

Similar Scope of Work:

- Design-Build with LANE
- Roadways
- Survey
- Environmental
- Geotechnical
- Right-of-Way
- Hydraulics
- Stormdrain and SWM
- Retaining Walls
- Traffic Control Devices
- Signs, Sign Structures, and Foundations
- Transportation Management Plan
- Utilities
- Stakeholder Coordination
- Public Involvement/Communications
- QA/QC

Proposed Personnel on Project:

Mo Kim (RDA)

Tony Dean (RDA)

Sidney Thomas (RDA)

Steven Thompson (RDA)

Mark Gunn (RDA)

Adam Welschenbach (RDA)

John Myers (RDA)

Chris Monahan (LANE)

Janet O’Neill (RDA)

PROJECT SCOPE

Rinker Design Associates, P.C. (RDA) provided professional engineering services from their Manassas Office serving as the Lead Designer for LANE’s I-66/Route 15 Interchange Reconstruction D-B project for VDOT. This \$36M D-B project will reconstruct the I-66/Route 15 Interchange to relieve congestion, enhance public safety, operations and capacity, and accommodate forecasted traffic demand in the project area. RDA designed the reconstructed interchange as a Diverging Diamond Interchange (DDI), the third of its kind in the Commonwealth of Virginia, to best accommodate the projected traffic volumes as well as critical pedestrian movements in the interchange area. The selection of the DDI alternative was the result of extensive analysis by RDA to find an interchange design that would best accommodate traffic demand, reduce the project footprint and environmental impacts, improve constructability and shorten overall construction duration when compared with previously considered alternatives, and reduce overall project cost. As the Lead Designer for the project, RDA’s responsibilities include:

- Interchange/Roadway Design
- Overall Project Design Management & QA/QC
- Public Involvement
- Drainage Design (Stormwater Management & BMP Design,
- Right of Way Acquisition Services

- Transportation Management Plan Design
- Signage & Marking Plan Design
- Utility Relocation Coordination & Design
- Erosion Control Plans, Local Drainage Design, Culvert Design, Outfall Analysis)
- Subconsultant Oversight & Management (Structural Design, Environmental Permitting & NEPA Document Update, Traffic Analysis & IMR Update, Signal Design)

RELEVANT PROJECT ELEMENTS TO I-95 EXPRESS LANES – SOUTHERN TERMINUS EXTENSION PROJECT

Partnering: LANE/RDA (the D-B Team) delivered VDOT a best value, innovative design by changing the RFP design from a flyover to a DDI. This same team will provide leadership and expertise on the I-95 Express Lanes – Southern Terminus Extension Project.

Innovative Design: The I-66/Route 15 Interchange reconstruction has been designed as a DDI. RDA analyzed multiple interchange alternatives to select the DDI for I-66/Route 15, which significantly reduces construction duration (1,250 days to 860 days). Similar to RDA’s experience on the I-66/Route 15 project, our Team’s “out of the box” thinking will be used to further innovate the design and construction process for the I-95 Express Lanes – Southern Terminus Extension Project

Transportation Management Plan: Similar to the I-95 Express Lanes – Southern Terminus Extension Project, the I-66/Route 15 Interchange required a complex TMP to construct the project in a high traffic volume area. RDA developed the TMP in coordination with LANE’s construction team to ensure constructability while maintaining acceptable traffic operations, including access to the adjacent commercial developments.

Right of Way Reductions: By introducing a DDI to this interchange and through design efficiencies, our Team was able to condense ROW by reducing impacts from 22 parcels to 16 parcels and eliminating two total parcel takes – saving VDOT over \$500K. The I-95/Rt 630 project will have similar benefits, especially with design efficiencies anticipated and envisioned.



Photo Courtesy of VDOT